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# SECTION 01025

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### SECTION 01025

### MEASUREMENT AND PAYMENT

#### PART 1 GENERAL

### 1.1 LUMP SUM PAYMENT ITEMS

### 1.1.1 General

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the BIDDING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

### 1.1.2 Lump Sum Items

- a. "Mobilization and Demobilization" [Item No. 0001]
  - (1) Payment will be made for costs associated with mobilization and demobilization, as defined in Contract Clause entitled "PAYMENT FOR MOBILIZATION AND DEMOBILIZATION".
  - (2) Unit of measure: lump sum.

# 1.2 UNIT PRICE PAYMENT ITEMS

# 1.2.1 General

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

# 1.2.2 Unit Price Items

- a. "Dredging" [Item Nos. 0002, 0003, and 0004]
  - (1) This item shall include all work as specified in SECTION 02482 DREDGING. The Contract unit price per cubic yard of dredging shall include the cost of removal, conveyance and disposal of all materials as shown on the drawings and as specified herein, except original materials, ledge rock, boulders, cobbles, rock fragments, scrap materials, snags, stumps, piles, debris or other material which cannot be removed or buried below the required depth by the plant specified in the accepted bid, or the equivalent of such plant, without blasting or special apparatus. The unit price

shall also include the cost of all work required to be performed for the use of the disposal area. Nothing in this paragraph shall be construed as prohibiting the removal of excepted material by special means at the prices agreed and approved in accordance with applicable provisions of the contract.

- (2) Unit of measure: Payment for all acceptably completed work required under SECTION 02482 of the specifications will be made at the applicable contract unit price per cubic yard for the payment items, "DREDGING:", "Russell Island shoal "First 1,000 Cubic Yards", and "Over 1,000 Cubic Yards", "Middle Ground shoal "First 1,500 Cubic Yards", and "Over 1,500 Cubic Yards", "BLACK RIVER shoal" "First 6,000 Cubic Yards", and "Over 6,000 Cubic Yards"
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# SECTION 01090

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### SECTION 01090

### SOURCES FOR REFERENCE PUBLICATIONS

# PART 1 GENERAL

### 1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the sponsoring organization, e.g. UL 1 (1993; Rev thru Jan 1995) Flexible Metal Conduit. However, when the sponsoring organization has not assigned a number to a document, an identifying number has been assigned for convenience, e.g. UL's unnumbered 1995 edition of their Building Materials Directory is identified as UL-01 (1995) Building Materials Directory. The sponsoring organization number (UL 1) can be distinguished from an assigned identifying number (UL-01) by the lack of a dash mark (-) in the sponsoring organization assigned number.

#### 1.2 ORDERING INFORMATION

The addresses of the organizations whose publications are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the sponsoring organization should be ordered from the source by title rather than by number.

# AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Ph: 610-832-9585 Fax: 610-832-9555

E-mail: cservice@astm.org

# CODE OF FEDERAL REGULATIONS (CFR)

Order from:

Government Printing Office Washington, DC 20402

Ph: 202-512-1800 Fax: 202-275-7703

Internet: http://www.pls.com:8001/his/cfr.html

### CORPS OF ENGINEERS (COE)

Order from:

U.S. Army Engineer Waterways Experiment Station ATTN: Technical Report Distribution Section, Services Branch, TIC 3909 Halls Ferry Rd. Vicksburg, MS 39180-6199

Ph: 601-634-2355 Fax: 601-634-2506

# MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

Financial Services Division Burea of Finance P.O. Box 30050 425 W. Ottawa St. Lansing, Mi 48909 Modem: 517-355-0014

ENGINEERING MANUALS (EM)
SAFETY AND HEALTH REQUIREMENTS MANUAL

USACE Publications Depot Attn: CEIM-SP-D 2803 52nd Avenue Hyattsville, MD 20781-1102

Ph: 301-394-0081

# ENGINEERING REGULATIONS (ER)

USACE Publications Depot

Attn: CEIM-SP-D 2803 52nd Avenue

Hyattsville, MD 20781-1102

Ph: 301-394-0081

# ENVIRONMENTAL PROTECTION AGENCY (EPA)

Public Information Center 401 M St., SW

Washington, DC 20460 Ph: 202-260-7751

FAX: 202-260-7751

Internet: http://www.epa.gov NOTE: Some documents are available

only from National Technical Information

Services (NTIS) 5285 Port Royal Rd. Springfield, VA 22161 Ph: 703-487-4600 Fax: 703-321-8547

Internet: http://www.fedworld.gov/ntis/ntishome.html

# PART 2 (Not Applicable)

# PART 3 (Not Applicable)

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### DIVISION 01 - GENERAL REQUIREMENTS

### SECTION 01100

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# PART 3 EXECUTION (NOT APPLICABLE)

### -- End of Section Table of Contents --

# SECTION 01100 SPECIAL PROJECT PROCEDURES

#### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred within the text by the basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

33 CFR 320-330 General Regulatory Policies, Permits,

Enforcement and Definitions

40 CFR 233 State Program Regulations

#### 1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-01 Data

Accident Prevention Plan; GA, AOF

Contractor shall provide an accident prevention plan including an activity hazard analysis to the Contracting Officer within 15 calendar days after receipt of award in accordance with Contract Clause titled "Accident Prevention (Nov 1991), Alternate 1 (Nov 1991) in SECTION 00700.

Payrolls and Basic Records; GA, AOF

Contractor shall submit payrolls and basic records in accordance with the Section 00700 clause entitled "PAYROLLS AND BASIC RECORDS (FEB 1988).

SD-07 Schedules

Progress Chart; GA, AOF

Contractor shall submit progress chart in accordance with the Section 00700 clause entitled "SCHEDULE FOR CONSTRUCTION CONTRACTS (APR 1984).

## 1.3 PRECONSTRUCTION CONFERENCE

After award of a contract, a conference will be arranged by the Contracting Officer's Representative between responsible personnel of the Contractor, Area Office and District Office. At this conference, the Contractor will be oriented with respect to Government procedures and line of authority for wage rates, contractual, administrative, and construction matters.

# 1.4 REGULATORY REQUIREMENTS

# 1.4.1 Additional Work Proposed and Not Authorized

# 1.4.1.1 Work Subject to 33 CFR 320-330

Any additional work (not specifically shown on the plans or delineated in the specifications) proposed by the Contractor in or affecting navigable waters, including wetlands (as defined in 33 CFR 320-330, published in the Federal Register Vol.51, No. 219, Thursday, November 13, 1986) shall not be performed without a Department of the Army Permit. This requirement shall be applicable to all work, permanent or temporary, and/or fill(s). The Department of the Army Permit shall be approved by the District Engineer or Deputy District Engineer in accordance with the laws of the United States and the regulations promulgated thereunder, including, but not limited to, the River and Harbor Act of 1899, the Clean Water Act and the National Environmental Policy Act of 1969, as amended. Corps employees (Contracting Officer's Representatives (COR) or inspectors) are not delegated authority to authorize such work. Information on making application for such permit(s) may be obtained by contacting one of the offices as listed hereinafter. When applying for information or a permit, a copy of any correspondence should be directed to the Contracting Officer of this contract. If a permit is not obtained, the additional work cannot be accomplished. Any delay in processing the permit will not constitute the basis of a claim under this contract. The fact that the Contractor is performing work under a Department of the Army Contract will give the Contractor no greater rights than any other applicant for a Department of the Army Permit.

#### MICHIGAN-INDIANA

Regulatory Office U.S. Army Engineer District, Detroit P. O. Box 1027 Detroit, MI 48231 Telephone: 313-226-6813

# 1.4.1.2 Work Subject to 40 CFR 233

Any additional work (not specifically shown on the plans or included in the specifications), proposed by the Contractor, in or affecting waters of the United States, including wetlands, in the State of Michigan (as defined in 40 CFR 233, published in the Federal Register, Vol. 49 No. 192, Tuesday October 2, 1984) shall not be performed without a State of Michigan regulatory permit. Information on making an application for such permit may be obtained by contacting the office listed hereinafter. When applying for a permit or for information, a copy of any correspondence shall be furnished to the Contracting Officer. If a permit is not obtained, the additional work shall not be performed. Any delay in obtaining or processing the permit will not constitute a basis for a claim under this contract.

# STATE OF MICHIGAN

Department of Environmental Quality Land & Water Management Division P.O. Box 30458 Stevens T. Mason Building Lansing, MI 48909 Telephone: 517-373-4608

# 1.5 PROJECT/SITE CONDITIONS

## 1.5.1 Condition and Use of Project Site

The drawings indicate soundings and elevations at the dredging and placement site as found in condition surveys made as stated on the contract drawings. A notification of at least five (5) calendar days shall be given to the Contracting Officer prior to bringing any construction equipment or material upon the work site. The Contractor shall be responsible for damages that may be suffered due to its operations. The Contractor shall note SECTION 00700 CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS."

# 1.5.1.1 Physical Conditions

The physical conditions shown on the drawings are indicative of those that prevailed at the time of the site investigations and may be different than those at the time of construction. Significant variations that would require changes to the plans or specification shall be reported to the Contracting Officer immediately.

# 1.5.2 Waterways Navigation and Traffic

The Contractor shall acquaint itself with all information and regulations pertaining to navigation and vessel traffic within the waterways at the project site. The Contractor shall coordinate with the U.S. Coast Guard to assure that a "NOTICE TO MARINERS" is issued prior to its work activity at the project site. A copy of the requisite notice form is enclosed in SECTION 01999. The completed form shall be sent to the address stated in the Subparagraph entitled "Temporary Lights, Signals and Buoys Required by U.S. Coast Guard". The Government will not undertake to keep the waterways free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917 (see Title 33, U.S.C.A. Sec. 1). The Contractor is required to conduct its work in such manner as to obstruct navigation as little as possible and, in case the Contractor's plant so obstructs a channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon completion of the work, the Contractor shall promptly remove its plant, including ranges, buoys, piles, and other marks placed by it under the contract in navigable waters or on shore.

# 1.5.2.1 Navigation

Information and regulations pertaining to navigation may be obtained from the current issue of the "UNITED STATES COAST PILOT 6," issued annually by the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). The "UNITED STATES COAST PILOT" may be obtained from National Ocean Survey, NOAA, Distribution Division-C44, Riverdale, Maryland 20840.

# 1.5.2.2 Traffic

Vessels that may use the waterways at the project site consist of recreational craft and commercial vessels. This traffic may interfere with contract operations and the Contractor shall conduct its work with due

regard to and in coordination with the requirements of all navigation. Information regarding the types and amount of passages made by commercial vessels that may use the waterways at the project site may be obtained from the current issue of the "Waterborne Commerce of the United States, Part 3, Waterways and Harbors, Great Lakes," published by the Department of Army, Corps of Engineers. The Department of the Army publication may be obtained at no charge from the following:

District Engineer, U.S. Army Engineer District, New Orleans, Waterborne Commerce Section, P.O. Box 60267, New Orleans, Louisiana 70160. Phone 504-862-1425, FAX 504-862-1091.

# 1.5.3 Existing Vegetation, Structures, Equipment, Utilities & Improvements

General locations of applicable existing utilities, vegetation, structures, equipment and improvements, based upon latest information available to the Government have been shown on the drawings. However, it is the Contractor's obligation to establish the exact horizontal and vertical location and size of all existing utility lines which are located within the required work area. The Contractor shall submit a utility location plan for approval by the Contracting Officer, locating existing utilities and a copy of its findings prior to commencing work on the site. Any utility lines which are not found by the Contractor, but which are known to exist at the project site, shall be reported to the Contracting Officer immediately. The Contracting Officer will have the option of directing commencement of work at the site or requiring the Contractor to submit further plans for locating the utility lines. Once the utilities have been located and marked, the Contractor shall be deemed to have the location made known to it pursuant to SECTION 00700 CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS." The Contractor is required under SECTION 00700 CLAUSE titled "PERMITS AND RESPONSIBILITIES" to comply with, but not limited to, the Michigan Protection of Facilities During Construction Activities Act. If the Contractor damages any existing utility line, vegetation, structure, equipment or improvement, a report thereof shall be made immediately to the Contracting Officer. In any event, existing utility lines, vegetation, structures, equipment or improvements shall be protected from damage, and if damaged, shall be repaired by the Contractor at its own expense.

# 1.5.4 Identification of Employees

The Contractor shall be responsible for requiring each employee engaged on the work to wear a hardhat of a distinctive color to identify that the person is an employee of the Contractor or display such identification as may be approved.

# 1.5.5 Contractor-Furnished Utility Services

The Contractor shall furnish, at its own expense, all water, electric current and other utilities required for its use.

# 1.5.6 Contract Supervision and Representation

The Contractor's local representative shall be available to Government representatives during duty hours, 8 a.m. to 4:30 p.m., on normal working days and shall be available by telephone at other times. The name of the Contractor's representative and the contact telephone number shall be furnished to the Government.

## 1.5.7 Coordination with Others

Reference is made to SECTION 00700 CLAUSE titled, "OTHER CONTRACTS". The Contractor is informed that the Government may have other Contractors engaged in placing dredged material into approximately the same Government-furnished disposal area provided for use under this contract. Sharing use of the Government's mooring facilities with others may also be necessary. The Contractor shall coordinate its operations with the work of others and share use of the facilities at no additional cost to the Government. The coordination shall be such that the required work under each affected contract is not prevented from being completed within its allowed completion time as a result of failure to cooperate and coordinate operations. Coordination with others shall be through the Contracting Officer's Representative at the site.

# 1.5.8 Temporary Lights, Signals and Buoys Required by Coast Guard

All temporary lights, signals and buoys required by the U.S. Coast Guard must be displayed during the required work. Information regarding required signals, lights, buoys and other requirements may be obtained from the Commander (OAN), U.S. Coast Guard, Shore Maintenance Detachment, ATTENTION: Aids to Navigation Branch, 1240 East Ninth Street, Cleveland, Ohio 44199-2060, Telephone (216) 522-3990.

### 1.5.9 Navigation Buoys

# 1.5.9.1 Buoy Relocation Position

If the relocation of existing navigation buoys is required to perform the contract work, the Contractor shall request permission for their relocation from the U.S. Coast Guard through the Contracting Officer. The request shall be provided to the Contracting Officer not less than three (3) weeks prior to need of the buoy relocation. The Contractor shall be responsible for performing the relocation work, which shall be in accordance with U.S. Coast Guard requirements.

# 1.5.9.2 Temporary Dredging and Construction Buoys

In order to distinguish temporary buoys placed and maintained by the Contractor for dredging or construction purposes from aids to navigation placed by the U.S. Coast Guard, the Contractor's buoys shall be white and the top two (2) feet shall be light green in color. The Contractor shall remove its temporary buoys at the completion of the work.

# 1.5.9.3 Buoy Markings

If buoys with special markings are needed to indicate the different sides of the navigable channel, prior arrangements shall be made with the U.S. Coast Guard, through the Contracting Officer.

# 1.5.10 Layout of Work and Surveys

# 1.5.10.1 Layout of Work

The following requirements are in addition to the requirements of SECTION 00800 CLAUSE titled "LAYOUT OF WORK." The Government has established bench marks and horizontal control points at the site of the work. Horizontal control points and descriptions of bench marks are shown on the drawings and on sheets enclosed in SECTION 01999. The elevations of bench marks are

referred to mean water level (IGLD 1985), at Rimouski, Quebec, Canada.

# 1.5.10.2 Surveyor Requirements

Prior to any survey work by the Contractor he shall submit his Survey Note Format showing in detail how he plans on taking survey notes in the field for the approval of the Contracting Officer. From these control points and bench marks, the Contractor shall lay out the work by establishing all lines, grades, range markers and gauges at the site as necessary to control the work. All survey information shall be recorded in accordance with standard and approved methods and in the format approved by the Contracting Officer. All field notes, sketches, recordings and computations made by the Contractor in performing the layout work shall be available at all times during the progress of the work for ready examination by the Contracting Officer or his or her duly authorized representative and upon completion of the contract work the originals shall be turned over to the Contracting Officer in ring binders.

# 1.5.10.3 Suspension

The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking the work. Such suspension will be withdrawn upon satisfactory replacement of location and limit marks. Such suspension shall be at no additional cost to the Government and shall not entitle the Contractor to an extension of time for completing the work.

## 1.6 SEQUENCING AND SCHEDULING

# 1.6.1 Exclusion of Period in Computing Completion Schedules

No work will be required during the period between 1 December and 30 April, inclusive and the days in this period will not be counted when computing the required completion date. The Contractor may perform work, unless otherwise prohibited, during all or any part of this period upon giving prior written notice to the Contracting Officer.

# 1.6.2 Dredging Period Restriction

The Contractor's attention is directed to the allowed and prohibited dredging periods as established by the State of Michigan for this project as specified in SECTION 01130, "ENVIRONMENTAL PROTECTION" Paragraph, "PROTECTION OF FISH AND WILDLIFE RESOURCES", Subparagraph, "State of Michigan - Allowed and Prohibited Dredging". The number of calendar days within which the Contractor is required to complete the work under this contract, as established in SECTION 00800 Clause titled "COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK", is exclusive of the above referenced periods during which dredging is prohibited and the days in these periods will not be counted when computing the required completion date.

# 1.6.3 Sunday, Holiday And Night Operations

When the Contractor elects to work on Sundays or nights (when not prohibited herein), notice of its intention to do so shall be given to the Contracting Officer not less than forty-eight (48) hours in advance thereof. Adequate lighting for thorough inspection of night operations shall be provided by the Contractor at its expense.

### 1.6.3.1 Work Period Restrictions

No work is allowed at the project sites during the following periods:

- a. Holiday periods as follows:
  - (1) 6 p.m. 3 September to 6 a.m. 7 September 2004
  - (2) 6 p.m. 24 November to 6 a.m. 26 November 2004

The above-stated no-work periods, as applicable, are included in the number of calendar days within which the Contractor is required to complete the work as established in SECTION 00800 CLAUSE titled "COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK", and therefore the above-stated no-work periods will not entitle the Contractor to additional time for completion of the work.

### 1.6.4 Start Work

Dredging is prohibited before 15 August 2004. Evidence that the Contractor has started mobilization and preparation of submittal register, and other preparatory work will satisfy the requirement that work commence within ten (10) calendar days after receipt of Notice to Proceed. (See SECTION 00800 Clause titled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, FAR 52.212-0003.)

# 1.7 ON-BOARD ACCOMMODATIONS FOR INSPECTORS

The Contractor shall furnish regularly to the Government's inspectors on board the dredge or other craft performing the work a chair and a suitable separate lockable desk for office purposes. The desk shall be in a room fully equipped and maintained to the satisfaction of the Contracting Officer. The room shall be maintained at a comfortable temperature, ventilated and lighted. Washing and toilet facilities shall be made available for the inspectors. If the Contractor fails to meet these requirements, the facilities referred to above will be secured by the Contracting Officer, and the cost thereof will be deducted from payments to the Contractor.

### 1.8 PRESERVATION OF HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

If, during construction activities, the Contractor observes items that may have archaeological, historical or cultural value, such observations shall be reported immediately to the Contracting Officer so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the funds should be made. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent its employees from trespassing on, removing, or otherwise damaging such resources.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

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# SECTION 01101

# REAL ESTATE

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PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

-- End of Section Table of Contents --

### SECTION 01101

### REAL ESTATE

# PART 1 GENERAL

### 1.1 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-18 Records

Additional Real Estate Rights; GA, RED

Copies of any agreements for Contractor-acquired real estate rights shall be furnished before entering thereon.

### 1.1.1 REGULATORY REQUIREMENTS

# 1.1.2 Real Estate Rights

Rights for the use of the placement area have been obtained and the general limits of the areas are shown on the drawings. No other real estate rights have been obtained by the Government for this project.

# 1.1.3 Additional Real Estate Rights

Any additional real estate rights desired by the Contractor shall be obtained by the Contractor at its own expense. Such agreements shall clearly relieve the Government of any responsibility for damages or liability resulting from the Contractor's use of such grounds.

# 1.2 PROJECT/SITE CONDITIONS

### 1.2.1 Location and Verification

It shall be the Contractor's responsibility to accurately locate the limits of all lands utilized under the contract. The corner and angle points of each area for which rights have been obtained shall be marked with semipermanent markers except where there is an approved existing property marker. Temporary markers shall be placed at points on alignment. The points on alignment shall be marked at stations so that intervals between points do not exceed 200 feet.

# 1.2.2 Survey Markers

All markers shall be installed in an area prior to its use and they shall be available for reference during and upon completion of use of the area. Where approved existing property markers are found, a witness stake, as specified in Subparagraph, "Semipermanent Markers" below, shall be provided. If the types of markers specified hereinafter cannot be used, other types, as approved by the Contracting Officer, shall be provided.

# 1.2.2.1 Semipermanent Markers

The markers shall be a steel rod one-half inch in diameter and four (4) feet long. The steel rod shall be driven vertically into the ground so that the top is flush with the finished ground surface. Each marker shall be witnessed by a 2" x 2" yellow stake extending two (2) feet above the ground surface and driven into the ground until stable, with not less than one (1) foot penetration.

# 1.2.2.2 Temporary Markers

Markers shall be 2"  $\times$  2", red-colored, wood hub stakes driven into the ground until stable (not less than one (1) foot penetration) with two (2) feet projecting above the ground surface. If the period in which temporary markers are to be in place exceeds one (1) construction season, a more permanent type of marker, as approved, shall be provided.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

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### SECTION 01130

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### SECTION 01130

### ENVIRONMENTAL PROTECTION

### PART 1 GENERAL

### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 261

Identification and listing of Hazardous Waste

ENGINEERING MANUALS (EM)

EM 385-1-1

(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

MDOT 1996

(1996) Standard Specifications for Construction

## 1.2 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of plant or animal communities; or degrade the environment from an aesthetic, cultural or historic perspective. Environmental protection is the prevention/control of pollution and habitat disruption that may occur during construction. The control of environmental pollution and damage requires consideration of air, water, land, biological and cultural resources; (archaeological and historical resources) and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive materials; and other pollutants.

#### 1.3 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Environmental Protection Plan; GA, AOF

Submit in writing an Environmental Protection Plan within ten (10) calendar days after receipt of the Notice To Proceed. See Article titled ENVIRONMENTAL PROTECTION PLAN for details. Information on existing environmental documents pertaining to the project may be obtained by

contacting the Environmental Analysis Branch of the Planning Division, Detroit District, U.S. Army Corps of Engineers, 477 Michigan Avenue, Detroit, Mi. 48226.

### 1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor shall comply with all applicable Federal, State, and local laws, regulations, permits and licenses. The Contractor shall provide environmental protective measures and procedures to prevent and control pollution, limit habitat disruption, and correct environmental damage that occurs during construction.

## 1.4.1 Protection of Features

This section supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. The Contractor shall prepare a list of features requiring protection under the provisions of the contract clause which are not specially identified on the drawings as environmental features requiring protection. The Contractor shall protect those environmental features, indicated specially on the drawings, in spite of interference which their preservation may cause to the Contractor's work under the contract. The Contractor shall confine its activities to areas defined by contract drawings and specifications.

### 1.4.2 Environmental Assessment of Contract Deviations

The Contract specifications have been prepared to comply with the special conditions and mitigation measures of an environmental nature which were established during the planning and development of this project. The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternative borrow areas, disposal areas, staging areas, alternative access routes, etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and procedures indicated by the plans and specifications which may have an environmental impact will require a extended review, processing, and approval time by the Government. The Contracting Officer reserves the right to disapprove alternative methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternative method will have an adverse environmental impact or require including any additional environmental documents pertaining to the project. The Contractor shall obtain any necessary permits or licenses that have not been obtained by the Government.

# 1.5 ENVIRONMENTAL PROTECTION PLAN

The Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 30 days of operations. However, the Contractor shall furnish an acceptable final plan not later than 30 calendar days after receipt of the Notice to Proceed. Acceptance is conditional and is predicated upon satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met. The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. No physical work at the site shall begin prior to acceptance of the Contractor's plan

or an interim plan covering the work to be performed. The environmental protection plan shall include, but not be limited to, the following:

# 1.5.1 Federal, State and Local Laws and Regulations

The Contractor shall be knowledgeable of all Federal, State and local environmental laws and regulations which apply to the construction operations under the Contract and shall list any unique requirements applicable to this contract as part of the Environmental Protection Plan.

## 1.5.2 Spill Control Plan

The Contractor shall include as part of the environmental protection plan, a Spill Control Plan. The plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by the Emergency Response and Community Right-to-Know Act or regulated under State or local laws or regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

- a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.
- b. Training requirements for Contractor's personnel and methods of accomplishing the training.
- c. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
- d. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
- e. The methods and procedures to be used for expeditions contaminant cleanup.
- f. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity spill occurs. The plan shall contain a list of the required reporting channels and telephone numbers.

# 1.5.3 Recycling and Waste Minimization Plan

The Contractor shall submit a Recycling and Waste Minimization Plan as a part of the Environmental Protection Plan. The plan shall detail the Contractor's actions to comply with the following recycling and waste minimization requirements:

- a. The Contractor shall participate in State and local government sponsored recycling programs to reduce the volume of solid waste materials at the source.
- 1.5.4 Contaminant Prevention Plan

As a part of the Environmental Protection Plan, the Contractor shall prepare a contaminant prevention statement identifying potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the air, water, or ground. The Contractor shall detail provisions to be taken to meet Federal, State, and local laws and regulations regarding the storage and handling of these materials.

# 1.5.5 Environmental Monitoring

The Contractor shall include in the plan the details of environmental monitoring requirements under the laws and regulations and a description of how this monitoring will be accomplished. All environmental monitoring shall include monitoring of construction effects on "lands and water, air resources" and that the "effect to be monitored includes noise and vibration".

- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION
- 3.1 SPECIAL ENVIRONMENTAL PROTECTION REQUIREMENTS
- 3.1.1 Tree Protection

No ropes, cables, or guys shall be fastened to or attached to any tree(s) for anchorage unless specifically authorized by the Contracting Officer. Where such special use is permitted, the Contractor shall provide effective protection to prevent damage to the tree and other land and vegetative resources. Unless specifically authorized by the Contracting Officer, no construction equipment or materials shall be placed or used within the drip line of trees shown on the drawings to be saved. No excavation or fill shall be permitted within the drip line of trees to be saved except as shown on the drawings.

3.1.2 Location of Field Offices, Storage & Other Contractor Facilities

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in area provided by the Contractor. Temporary movement or relocation of Contractor facilities shall be made only on approval by the Contracting Officer.

3.1.3 Protection of Fish, Wildlife and Flora

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

3.1.4 U.S. Department of Agriculture (USDA) Quarantined Considerations

The Contractor shall thoroughly clean all construction equipment at the prior job site in a manner that ensures all residual soil is removed and that egg deposits from plant pests are not present. The Contractor shall consult with the USDA Plant Protection and Quarantine (USDA - PPQ) jurisdictional office for additional cleaning requirements that may be necessary.

# 3.1.5 Control of Non-Indigenous Aquatic Nuisance Species

The Contractor shall conduct diligent watercraft operating practices to prevent the spread of Aquatic Nuisance Species (ANS). Such practices shall include, but not be limited to, cleaning equipment on-site to prevent the spread of seeds, eggs, larvae, or other dispersal vectors (e.g. do not transport soil and plant matter from one location to another); and discharging or exchanging ballast water or other water from a vessel of any type only at a location where chances for survival of ANS are minimal, such as at cold, deep regions of the Great Lakes which are far from shore.

# 3.1.6 Soil Disposal Areas on Government Property

Material disposal on Government property shall occur only in those areas designated on the contract drawings. Hazardous, toxic, and radiological wastes (HTRW) shall not be disposed of on Government property. Disposal operations shall be managed and controlled to prevent erosion of soil or sediment from entering nearby waters or wetlands. Disposal operations shall be developed and managed in accordance with the grading plan shown on the drawings or as approved by the Contracting Officer.

### 3.1.7 Disposal of Solid Wastes

Solid waste is rubbish, debris, waste materials, garbage, and other discarded solid materials (excluding clearing debris and hazardous waste as defined in following paragraphs). Solid waste shall be placed in containers and disposed on a regular schedule. All handling and disposal shall be conducted in such a way as to prevent spillage and contamination.

## 3.1.8 Protection of Land

## 3.1.8.1 Work Area Limits

Prior to any construction the Contractor shall mark where work is to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible during darkness, The Contractor shall convey to its personnel the purpose of marking and/or protection of all necessary objects.

# 3.1.8.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features to be preserved, indicated and defined on the drawings submitted by the Contractor as a part of the Environmental Protection Plan shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

### 3.1.8.3 Disposal of Chemical Waste

Chemical waste shall be stored in corrosion resistant containers, removed from the work area and disposed of in accordance with Federal, State, and local laws and regulations.

# 3.1.8.4 Spillages

Special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, ashes, sawdust, waste washings, herbicides and insecticides, rubbish or sewage, and other pollutants from entering public waters.

3.1.8.5 Hydrocarbons, Carbon Monoxide and Oxides of Nitrogen and Sulfur Oxides

Vapor/gaseous emissions of hydrocarbons, carbon monoxide, oxides of nitrogen and sulfur oxides from equipment shall be controlled to Federal and State allowable limits at all times.

## 3.1.8.6 Odors

Odors from construction activities, processing and preparation of materials shall be controlled at all times.

#### 3.1.8.7 Protection from Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize damage to the environment by noise.

### 3.1.9 Clearing Debris

Clearing debris is trees, tree stumps, tree trimmings, and shrubs, and leaves, vegetative matter, excavated natural materials (e.g., dirt, sand, and rock), and demolition products (e.g., brick, concrete, glass, and metals).

- a. The Contractor shall collect trees, tree stumps, tree trimmings, shrubs, leaves, and other vegetative matter; and shall transport from Government property for proper disposal and/or recycling in compliance with Federal, State, and local requirements. The Contractor shall segregate the matter where appropriate for proper disposal. Untreated and unpainted scrap lumber may be disposed of with this debris where appropriate.
- b. Excavated natural materials shall be placed in the designated area on the drawings.
- c. Demolition products shall be transported from Government property for proper disposal and/or recycling in compliance with Federal, State, and local requirements.

# 3.1.10 Disposal of Contractor Generated Hazardous Wastes

Hazardous wastes are hazardous substances as defined in 40 CFR 261, or as defined by applicable State and local regulations. Hazardous waste generated by construction activities shall be removed from the work area and be disposed in compliance with Federal, State, and local requirements. The Contractor shall segregate hazardous waste from other materials and wastes, and shall protect it from the weather by placing it in a safe covered location; precautionary measures against accidental spillage such as berming or other appropriate measures shall be taken. Hazardous waste shall be removed from Government property within 60 days. Hazardous waste shall not be dumped onto the ground, into storm sewers or open water

courses, or into the sanitary sewer system.

### 3.1.11 Fuels and Lubricants

Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants and waste oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with Federal, State, and local laws and regulations.

### 3.2 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

# 3.2.1 Discovered Historic, Archaeological, and Cultural Resources

If during construction activities, items are observed that may have historic or archaeological value (e.g., human remains or associated objects, or artifacts are discovered), such items shall be protected in place and the observations shall be reported immediately to the Contracting Officer so that the District Archaeologist may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall prevent its employees from trespassing on, removing, or otherwise disturbing such resources.

# 3.3 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

## 3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that required specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

# 3.4.1 State of Michigan - Allowed and Prohibited Dredging

During the following periods of the year dredging is allowed:

# Harbor Allowed Periods:

St. Clair River

15 July 2004 through 31 March 2005

Dredging is prohibited during any other periods.

## 3.4.2 Particulates

Airborne particulates, including dust particles, aerosols, and gaseous by products from construction activities and processing and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, disposal sites, borrow areas, and all other work areas free from airborne dust which would cause a hazard or nuisance.

## 3.5 INSPECTION

If the Contracting Officer notifies the Contractor in writing of any observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall inform the Contracting Officer of proposed corrective action and take such action to correct the noncompliance. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

# 3.6 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed pollution control facilities and portable pollution control devices for the duration of the Contract or for the length of time construction activities create the particular pollutant.

# 3.7 TRAINING OF CONTRACTOR PERSONNEL

Contractor personnel shall be trained in environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel monthly. The training and meeting agenda shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, installation and care of facilities (vegetative covers, etc.), and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control. Anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants, shall also be discussed. Other items that must be discussed shall include recognition and protection of Archaeological sites and artifacts and historic structures.

### 3.8 POST CONSTRUCTION CLEANUP OR OBLITERATION

The Contractor shall obliterate all signs of temporary facilities such as haul roads, work area, structures, stock piles of excess or waste materials, fencing, buoys, stakes, or other vestiges of construction within the work, storage and access areas or as directed by the Contracting Officer. Except for surfaced areas, the areas shall be restored to near natural conditions which permit the growth of vegetation thereon. In areas where restoration to near natural conditions is not required, surfaces shall be evenly and smoothly dressed, sloped to drain, and the edges of the restored area graded to be flush with the surrounding existing grade even if original contours are not restored. All damaged non-surfaced areas shall be restored by topsoiling, fertilizing, seeding and mulching, unless otherwise specified or directed. The topsoiling, fertilizing, seeding, and mulching shall be in accordance with the applicable provisions of MDOT 1996.

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### SECTION 01312A

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# SECTION 01312A

# QUALITY CONTROL SYSTEM (QCS)

### 1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Import/Export of Data

## 1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

### 1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01320A, PROJECT SCHEDULE, Section 01330, SUBMITTAL PROCEDURES, and Section 01451A, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

## 1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

# 1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS:

#### Hardware

IBM-compatible PC with 500 MHz Pentium or higher processor

128+ MB RAM for work station/ 256+MB RAM for server.

4 GB hard drive disk space for sole use by the QCS system

3 1/2 inch high-density floppy drive

Compact disk (CD) Reader 8X speed or higher

SVGA or higher resolution monitor (1024X768, 256 colors)

Mouse or other pointing device.

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

Connection to the Internet, minimum 56k BPS

#### Software

MS Windows 98, ME, NT, or 2000

Word Processing software compatible with MS Word 97 or newer

Latest version of; Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher

The Contractor's computer system shall be protected by virus protection software that is regularly upgraded with all issued manufacturer's updates throughout the life of the contract.

Electronic mail (E-mail) MAPI compatible.

## 1.4 RELATED INFORMATION

### 1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

# 1.4.2 Contractor Quality Control(CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

### 1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and OA data.

# 1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

#### 1.6.1 Administration

#### 1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

## 1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

# 1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

# 1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

# 1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective

of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

### 1.6.2 Finances

# 1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

# 1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

# 1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451A, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

# 1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451A, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

# 1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies

identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

# 1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

# 1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 200.

### 1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

# 1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

### 1.6.4 Submittal Management

The Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

### 1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or Section 01320A, PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually

or by using the Standard Data Exchange Format (SDEF) (see Section 01320A PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

## 1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

### 1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

### 1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

### 1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

# 1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

# 1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

## 1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be

returned. The Government will not process progress payments until an acceptable QCS export file is received.

#### 1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

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#### SECTION 01330

#### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

#### 1.1 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

#### 1.1.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items where specified and as designated by the Contracting Officer. Within the terms of SECTION 00700 Clause titled "SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION", all such items are considered to be "shop drawings".

#### 1.1.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

#### 1.2 APPROVED SUBMITTALS

The approval of submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist in as much as the Contractor, under the Contractor Quality Control (CQC) requirements of this contract, is responsible for the dimensions and design of adequate connections, details and satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be given consideration unless accompanied by an explanation as to why a substitution is necessary.

#### 1.2.1 Other Designated Approving Authority

In the column titled "REVIEWER" on the submittal register ENG FORM 4288, or equivalent RMS form, the designated approving authority for each submittal requiring Government Approval is identified by an acronym. Following is a list of acronym used and their full description:

- AOF Corps of Engineers Area Office
- RED Corps of Engineers Real Estate Division
- ECD Engineering and Construction Division

#### 1.3 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

#### PART 2 PRODUCTS (Not Applicable)

#### PART 3 EXECUTION

#### 3.1 GENERAL

The Contractor shall submit all items listed on the Submittal Register (ENG FORM 4288) or specified in the other Sections of these specifications. The Contracting Officer may request submittals in addition to those listed when deemed necessary to adequately describe the work covered in the respective Sections. Units of weights and measures used on all submittals shall be the same as used in the contract drawings. Submittals shall be made in the required number of copies and to the applicable Area Office. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked, stamped in accordance with ARTICLE 3.9, STAMPS, and approved by the CQC representative. Each respective transmittal form (ENG FORM 4025) shall be signed and dated by the CQC representative certifying that the accompanying submittal complies with the contract requirements. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals including parts list; certifications; warranties and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby.

#### 3.2 SUBMITTAL REGISTER (ENG FORM 4288)

In SECTION 01999 is one set of the ENG FORM 4288 listing each item for which submittals are required by the specifications. The Contractor shall complete filling out the blanks on the form in columns a, q, r, s, t, u and v, and return two (2) completed copies to the Contracting Officer for approval within ten (10) calendar days after receipt of the Notice to Proceed. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. This register and progress schedules shall be coordinated and updated regularly by the Contractor.

#### 3.2.1 Resident Management System (RMS)

Reference is made to the RMS specified in PART 3 of SECTION 01451, CONTRACTOR QUALITY CONTROL and the applicable SUBMITTAL INFORMATION form enclosed in SECTION 01999. The Contractor is not required to make duplicate submittals and shall use the RMS form in lieu of ENG FORM 4288. An RMS software module will be supplied to the Contractor for running and utilizing the RMS program.

#### 3.2.2 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with pertinent drawings shall be so scheduled. Adequate time (a minimum of 10 calendar days exclusive of mailing time) shall be allowed on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late

submittals.

#### 3.3 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG FORM 4025) is available at the Area Office, and shall be used for submitting both Government approved and information only submittals in accordance with instructions on the reverse side of the form. These forms will be furnished to the Contractor or may be copied from the copy provided by the Area Office. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

#### 3.4 DEVIATIONS

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG FORM 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

#### 3.5 CONTROL OF SUBMITTALS

The Contractor shall carefully control its procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register".

#### 3.6 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval (GA), the submittal will be identified as having received approval by being so stamped and dated. The distribution of approved copies will be as specified in SECTION 00700 Clause titled "SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION".

#### 3.6.1 Reservation of Rights

The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications and will not prevent the Contracting Officer from requiring removal and replacement if nonconforming material is incorporated in the work. This does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or check testing by the Government in those instances where the technical specifications so prescribe.

#### 3.7 INFORMATION ONLY SUBMITTALS

Normally submittals for information only (FIO) will not be returned but receipt thereof will be acknowledged. Approval of the Contracting Officer is not required on information only submittals. These submittals will be used for information purposes. FIO submittals shall be limited to 3 copies unless otherwise directed.

#### 3.8 STAMPS

Stamps, approximately 2 inches high by 3 inches wide and similar to the following, shall be used by the Contractor on the submittal data to validate approval:

CONTRACTOR
(FIRM NAME)
Approved
Approved with corrections as noted on submittal data and/or attached sheet(s)
SIGNATURE:
TITLE:
DATE:

#### 3.9 ACCIDENT PREVENTION PLAN

The format of the Contractor's Accident Prevention Plan shall be in accordance with Table 1-1, GUIDELINES FOR PREPARATION OF ACCIDENT PREVENTION PLAN of the SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, 3 Sept 1996. A copy of NCE FORM 129 is available at the Area Office for use in preparing activity hazard analysis documentation.

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#### SECTION 01451

#### CONTRACTOR QUALITY CONTROL

#### PART 1 GENERAL

#### 1.1 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Quality Control Plan; GA-AOF

Submit in writing a Quality Control Plan within thirty (30) calendar days after receipt of Notice to Proceed.

SD-08 Statements

CQC System Manager; GA-AOF

Submit in writing the name and qualifications of the Contractors Quality Control Manager.

SD-09 Reports

Preparatory Inspection Checklist; FIO

Submit a Preparatory Inspection Checklist 24 Hours in advance of beginning any of the required action of the preparatory control phases.

Initial Inspection Checklist; FIO

Submit a Initial Inspection Checklist 24 Hours in advance of beginning any of the required action of the initial control phases.

Daily Inspection Report; FIO

Submit a Daily Inspection Report within 24 Hours after any calendar day the Contractor is on the job site.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

#### 3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with SECTION 00700 Clause titled "INSPECTION OF CONSTRUCTION." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The

system shall cover all construction operations, both on-site and off-site, and shall be keyed to the proposed construction sequence.

#### 3.2 QUALITY CONTROL PLAN

#### 3.2.1 General

The Contractor shall furnish for review by the Government, not later than 10 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of SECTION 00700 Clause titled "INSPECTION OF CONSTRUCTION." The plan shall identify personnel, procedures, control, instructions, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

#### 3.2.2 Content of the CQC Plan

The CQC plan shall include, as a minimum, the following to cover all construction operations, both on-site and off-site, including work by subcontractors:

- a. Information required in the paragraph titled "IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SUSTEM (RMS)" shall be incorporated into the Contractor's Quality Control plan, as applicable.
- b. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC system manager who shall report to the project superintend.
- c. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- d. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities and responsibilities. Copies of these letters shall also be furnished to the Government.
- e. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors. These procedures shall be in accordance with SECTION 01330, "SUBMITTAL PROCEDURES".
- f. Procedures for tracking preparatory, initial, and follow-up control phases, including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been

corrected.

- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements. This list shall be as agreed upon during the coordination meeting.

#### 3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in its CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

#### 3.2.4 Changes to Plan

After acceptance of the QC plan, the Contractor shall submit any proposed QC plan changes to the Contracting Officer in writing a minimum of 7 calendar days prior to the proposed implementation date for the change. Changes to the plan shall not be made prior to the Contracting Officer's approval of the change.

#### 3.3 COORDINATION MEETING

Immediately after adjournment of the required Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the Quality Control Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. A draft copy of the CQC Plan shall be provided to the Government at least three working days prior to the CQC meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, administration of the system for both on-site and off-site work, and the interrelationship of the Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government and are to be signed by both the Contractor and the Contracting Officer or the Contracting Officer's Representative. The minutes shall be separate from the Preconstruction Conference minutes and shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

#### 3.3.1 Finalize CQC Plan

Immediately following the Preconstruction Conference, the Contractor shall finalize the CQC plan, taking into account comments made at the conference, and shall formally submit the CQC plan for acceptance. The Contractor shall allow up to 10 calendar days for review and acceptance of the finalized submittal.

#### 3.4 QUALITY CONTROL ORGANIZATION

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract

compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

#### 3.4.1 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the on site work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be a construction person with a minimum of 3 years in related work. This CQC system manager shall be on site at all times during construction and shall be employed by the prime Contractor The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

#### 3.4.2 Additional Requirements

In addition to the above experience and education requirements the CQC System Manager shall have completed the course titled "Construction Quality Management For Contractors". This course is periodically offered at one or more of the Area Offices within the District.

#### 3.4.3 Organizational Changes

The Contractor shall obtain Contracting Officer's acceptance before replacing any member of the CQC staff. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement.

#### 3.5 SUBMITTALS

Submittals shall be as specified in SECTION 01330 "SUBMITTAL PROCEDURES". The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

#### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors, complies with the requirements of the contract. The controls shall be adequate to cover all construction operations and will be keyed to the proposed construction sequence. The controls shall include at least three phases of control to be conducted by the CQC system manager for all definable features of work, as follows:

#### 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work and shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract plans.
- c. A check to assure that all required submissions have been made and

approved.

- d. A check to assure that provisions have been made to provide required control inspection.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- g. Discussion of procedures for constructing the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that phase of work.
- h. A check to ensure that the CQC plan for the work to be performed has been accepted by the Contracting Officer.
- i. The Government shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by a completed Preparatory Inspection Checklist and by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract requirements.

#### 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verification of full contract compliance. Verify required control inspection.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. A completed initial inspection checklist of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

#### 3.6.3 Follow-up Phase

Daily checks shall be performed to assure continuing compliance with contract requirements until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work.

3.6.4 Implementation of Government Resident Management System (RMS)

The Contractor shall utilize the Government-furnished CQC Management Report, NCE Form 63 for its daily reports. (Copy enclosed in SECTION 01999). Other Contractor desired reporting forms may be used in addition to this form. The Contractor shall use a government-furnished RMS CQC computer module for managing the quality control for this project. On the Government-furnished Input Forms in SECTION 01999 for use with the RMS, the Contractor shall provide the following information:

- (1) Prime Contractor staffing
- (2) letter codes which the Contractor wishes to use in addition to those supplied with the program libraries. A list of current existing codes is provided in SECTION 01999.
- (3) subcontractor information showing trade, name, address, and insurance expiration dates
- (4) Definable features of work from a Government provided dictionary (may be expanded by the Contractor, as approved).
- (5) Pay activity and activity information, including minimum and maximum durations for each activity on a separate listing. The sum of all activity values shall equal the contract amount and, all Bid Items and Additives shall be separately identified, in accordance with the BIDDING SCHEDULE. Bid Items may include multiple activities, but activities may only be assigned to one such Bid Item. All of the data listed in this Subpart 6 shall be provided and the RMS CQC module shall be completed to the satisfaction of the Contracting Officer prior to any contract payments (except payments for bonds, insurance and/or mobilization as approved by the Contracting Officer) and shall be updated as required.
- (6) Required Quality Control tests (as applicable) tied to individual activities. The QC Reports/QC Requirements function of the RMS QC Module will be used to meet the requirements for tracking of verification and acceptance testing specified in the paragraph titled "Content of the CQC Plan".
- (7) Submittal information relating to specification section, bid item number, description, activity number, review period and expected procurement period
- (8) User schooling information (as applicable).

The above items shall be incorporated into the required submittal for the Contractor's Quality Control Plan required in the paragraph titled "QUALITY

CONTROL PLAN" of this Section.

- a. During the course of the contract, the Contractor will receive various Quality Assurance comments from the Government that will reflect corrections needed to Contractor activities or reflect outstanding or future items needing the attention of the Contractor. The Contractor shall acknowledge receipt of these comments by specific number reference on its Daily CQC Report, and will also reflect on his Daily CQC Report when these items are specifically completed or corrected to permit Government verification. The contractor will use the QC COMMENTS function of the RMS QC Module to meet the requirements for tracking construction deficiencies as specified in paragraph titled, "Content of the CQC Plan".
- b. The Contractor's schedule system shall include, as specified and separate activities, all Preparatory Phase Meetings (inspections); all O&M Manuals (as applicable) and all Test Plans of Electrical and Mechanical Equipment or Systems that require validation testing or instructions to Contracting Officer Representatives (as applicable).

#### 3.6.5 Additional Preparatory and Initial Phases

Additional preparatory and initial phases may be conducted on the same definable features of work as determined by the Government if the quality of on-going work is unacceptable; or if there are changes in the applicable QC staff or in the on-site production supervision or work crew; or if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

#### 3.7 DOCUMENTATION

The Contractor shall maintain Daily Inspection Report of quality control operations, activities, and tests performed, including the work of subcontractors. These records shall be on an acceptable form and shall include factual evidence that required quality control activities and/or tests have been performed, including but not limited to the following:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed today, giving location, description, and by whom. For dredging projects, the report shall always include the character and types of materials removed. Whenever there is a significant change in the materials, the location of such change shall be included in the reports.
- d. Control activities performed with results and references to specifications/plan requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Identify submittals reviewed, with contract reference, by whom, and action taken.
- f. Off-site surveillance activities, including actions taken.
- g. Job safety evaluations stating what was checked, results, and

instructions or corrective actions.

- h. List instructions given/received and conflicts in plans and/or specifications.
- i. Contractor's verification statement.
- j. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that the workmanship complies with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date(s) covered by the report, except that reports need not be submitted for days on which no work is performed. All calendar days shall be accounted for throughout the life of the contract. The first report following a period of no work shall be for that day and all the no-work days since the last reported work day. Reports shall be sequentially numbered for this project, signed and dated by the CQC system manager. The report from the CQC system manager shall include copies of reports prepared by all subordinate quality control personnel.

#### 3.8 SAMPLE FORMS

Sample forms for the CQC Management Report, Preparatory Inspection Checklist, Initial Inspection Checklist, and other required reports and plans are enclosed in SECTION 01999. The Contractor shall tailor the checklists to include all reporting and quality control requirements specific to this project.

#### 3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor or subcontractor.

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#### SECTION 01999

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#### SECTION 01999

LISTING OF ENCLOSED DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

#### PART 1 GENERAL

#### 1.1 ENCLOSURES

This Section contains documents referenced in other Sections of the specifications. They are consolidated in this Section for the convenience of the Contractor and the Government. The Contractor may reproduce the enclosed forms for it's use or obtain a supply of the forms from the Contracting Officer.

#### LIST OF ENCLOSED DOCUMENTS

CONSTRUCTION QUALITY MANAGEMENT REPORT - NCE FORM 63, 6 MAY 77. (2 Sides)

PREPARATORY INSPECTION CHECKLIST (3 SIDES)

INITIAL INSPECTION CHECKLIST (2 SIDES)

ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS- NCE FORM 129, 6 JUNE 1986.

RESIDENT MANAGEMENT SYSTEM FORMS

- A. CURRENT ACTIVITY SYSTEM FORMS
- B. INITIAL INSPECTION WORKSHEET
- C. PREPARATORY INSPECTION WORKSHEET
- D. CONTRACTOR QUALITY CONTROL REPORT
- E. TRANSMITTAL SHEET (4025-R)

SUBMITTAL REGISTER - ENG FORM 4288, MAY 91

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MAMUFACTURE'S CERTIFICATIONS OF COMPLIANCE ENG FORM 4025, MAY 91 (2 SIDES)

DAILY REPORT OF OPERATIONS - HOPPER DREDGES-ENG FORM 27A, 1 APR 73 (2 SIDES)

REPORT OF OPERATIONS - PIPELINE, DIPPER OR BUCKET DREDGES -ENG FORM 4267, JAN 70 (2 SIDES)

OVERDEPTH AND TOLERANCES DRAWINGS

NOTICE TO MARINERS FORM

GENERAL DECISION NO. IL030018

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

--End of Section--

# CONSTRUCTION QUALITY CONTROL MANAGEMENT

DATE			REPORT	
CONTRACTOR		CONTRACT NO		
PROJECT NAME		LOCATION		
WEATHER TYPE	TEMP. MAX	MIN RAINFAL	L GAGE READING_	
EMPLOYEES: SUPV	SKILLED	LABORERS	LENGTH OF SHIFT	HR
	· ·		AND AREA OF RESPONSIBI	LITY.
A				
B				
C				
D				
E				
	DAY: (LOCATION, DI		ID RESPONSIBILITY BY LETTE	
	( Relate to Hell	is on the Progress Chart of C	1 1/1)	
INSPECTION: (DESCRIPTION: (DESCRIPTION)		ECTION AND LOCATION	N. INCLUDE OFF-SITE, MA	ATERIALS ANI
A. PREPARATORY P	HASE:			
B. INITIAL PHASE:				
C. CONTINUOUS PHA	SE:			
RESULTS OF INSPECT	 ΓΙΟΝ: (INCLUDE FI	NDINGS, DEFICIENCIES (	OBSERVED & CORRECTIVE	ACTION)
				,

SECTION 01999 Page

EDITION OF 22 JUNE 76 IS OBSOLETE

NCE FORM 63 6 MAY 77

RESULTS OF SURVEILLANCE CONTINUED:
TEST PERFORMED: TYPE, LOCATION, RESULTS INCLUDING FAILURES & REMEDIAL ACTION, (ATTACH COPY OF TEST REPORT OR NOTATION WHEN IT WILL BE FURNISHED.)
WORK ITEMS BEHIND SCHEDULE: REASON, EFFECT ON PROGRESS SCHEDULE AND ACTION TAKEN.
JOB SAFETY: (REPORT CONDITIONS, DEFICIENCIES, CORRECTIVE ACTION & RESULTS.)
REMARKS: LIST ATTACHMENT AND OTHER MANAGEMENT ACTIONS TAKEN TO ASSURE QUALITY CONSTRUCTION
IF INSPECTION & RESULTS ARE NOT LISTED THEN IT IS ASSUMED THAT QUALITY CONTROL IS NOT BEING IMPLEMENTED.  THE ABOVE REPORT IS COMPLETE AND CORRECT AND ALL MATERIALS & SUPPLIES INCORPORATED IN THE WORK ARE IN COMPLIANCE WITH THE TERMS OF THE CONTRACT EXCEPT AS NOTED:
CONTRACTOR'S APPROVED REPRESENTATIVE SIGNATURE

## PREPARATORY INSPECTION CHECKLIST

CONTRACT NO:		DATE:		
TITLE:		SPECS. SECTION:		
MAJOR DEFINABLE SEGMEN	T OF WORK:_			
A. PERSONNEL PRESENT:				
<u>NAME</u>	<u>PO</u>	<u>SITION</u>	COMPANY	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
B. TRANSMITTAL INVOLVED <u>NUMBER &amp; ITEM</u>	o: <u>CODE</u>	<u>CONTRACTO</u>	R OR GOVERNMENT APPROVAL	
1				
2				
3				
4				
5				

# PREPARATORY INSPECTION CHECKLIST

B-I. Have all items involved been approved	Yes	_ No
B-II. What item have not been approved?		
<u>ITEM</u> 1	<u>STATUS</u>	
2		
3		
4		
5		
C. Are all materials on hand?	Yes	No
C-I. Are all materials on hand accordance with	approvals? Yes_	No
C-II. Items not on hand or not in accordance wi	th transmittals:	
1		
2		
3		
4		
D. Test required in accordance with contract re	equirements:	
<u>TEST</u> 1	<u>PARAGRAPI</u>	<u>H</u>
2		
3		

Page 2 of 3

#### PREPARATORY INSPECTION CHECKLIST

# 

QUALITY CONTROL – PRIME CONTRACTOR

Page 3 of 3

## INITIAL INSPECTION CHECKLIST

CONTRACT NO:		DATE:		
Description and Location of Work	Inspected:			
	Specs. Se	ection:		
REFERENCE CONTRACT DRAW	VING:			
A. PERSONNEL PRESENT :				
NAME	POSITION	COMPANY		
2				
3				
l				
5				
ó				
·				
3				
)				
0				
B. MATERIALS BEING USED AI	RE IN STRICT COMPLIANCE V	WITH THE CONTRACT DI ANS		
		WITH THE CONTRACT LEANS		
AND SPECIFICATION: YES				
F NOT,EXPLAIN:				

# INITIAL INSPECTION CHECKLIST

C. PROCEDURES AND WORK METHODS WITNESSED ARE IN STRICT COMPLIANCE WITH						
THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS: YES NO_						
IF NOT, EXPLAIN:						
D. WORKMANSHIP IS ACCEPTABLE: YES NO STATE AREAS V	WHERE					
IMPROVEMENT IS NEEDED:						
E. SAFETY VIOLATIONS AND CORRECTIVE ACTION TAKEN:						
QUALITY CONTROL REPRES	ENTATIVE					

Page 2 of 2

# ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS

Dage	οf
rage	OI

1. Contract No.		2. Project	3. Facility	
4. Date		5. Location	6. Estimated Start Date	
7. Item	8. Phase of Work	9. Safety Hazard	10. Precautionary Action Taken	
11. Contra	ctor (Signature & Date)	1	1	
12. Report discussed with contractor/ superintendent on			13. Contracting Officer (Signature & Date)	



# **Current Activity Summary**

Project Name: Repair of North & South Piers, Baloney Harbor, MI Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0001	North and South Pier Repairs	1	\$3,437,787.18 / LS	\$3,437,787.18
1001	Bonds			\$49,136.00
1002A	Prepare & Mobilize Equipment			\$94,864.00
1002B	Prepare Site			\$72,500.00
1002C	Office Trailers & Utilities			\$22,500.00
1003A	Demobilize Equipment			\$5,000.00
1003B	Site Restoration			\$2,500.00
1003C	As-Built Drawings			\$2,500.00
1004A	Furnish SSP			\$750,000.00
1004B	Furnish Special Piles			\$50,000.00
1004C	Furnish SSP Pile Shoes			\$30,000.00
1004D	Fabricate Template			\$6,000.00
1004E	Excavate Driving Line			\$100,000.00
1004F	Set & Drive SSP			\$500,000.00
1004G	Backfill Driving Line			\$50,000.00
1004I	South Driving Line Obstruction Removal			\$117,787.18
1005A	Furnish Misc. Steel			\$193,000.00
1005B	Furnish Tie-Rods			\$20,000.00
1005C	Furnish Plate Washers			\$15,000.00
1005D	Furnish Fastners			\$12,000.00
1005E	Place Misc. Steel			\$280,000.00
1006A	Demo Concrete & Remove (Rubblemound)			\$100,000.00
1006B	Excavate Existing Cribs (Rubblemound Area)			\$185,000.00
1006C	Disposal of Demo Materials (Rubblemound Area)			\$25,000.00
1007A	Furnish H-Pile Materials			\$22,800.00
1007B	Install H-Piles			\$27,200.00
1008A	Furnish Rebar			\$135,000.00
1008B	Place Concrete (2000 CY @ \$250.00/CY)			\$500,000.00
1009A	Furnish Handrails			\$60,000.00
1009B	Place Handrails			\$7,000.00
1009C	Paint Handrails			\$3,000.00
				\$3,437,787.18
CLIN 0002	Fill Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assigned	to this Bid Item.		
CLIN 0002AA	First 18,000 tons	18,000	\$22.50 / TN	\$405,000.00
2001	Furnish & Place Fill Stone - 1st 18,000 Tons			\$405,000.00
				\$405,000.00
CLIN 0002AB	Over 10,000 tons	2,000	\$22.50 / TN	\$45,000.00
2101	Furnish & Place Fill Stone - Over 18,000 Tons			\$45,000.00
0/ 11/ 0000			<b>A A A A A A A A A B A B B B B B B B B B B</b>	\$45,000.00
CLIN 0003	Underlayer Stone:	0	\$0.00 / NA	\$0.00
OL IN 0000 A A	No Activities Assigned		\$24.50 / TN	\$4.44.750.00
CLIN 0003AA	First 4,500 Tons Furnish & Place Underlayer Stone - 1st 4,500 Tons	4,500	\$31.50 / TN	\$141,750.00 \$141,750.00
3001	i umish & Flace Unidenayer Stuffe - 15t 4,500 TURS			\$141,750.00 \$141,750.00
CLIN 0003AB	Over 4,500 tons	450	\$31.50 / TN	\$14,175.00
3101	Furnish & Place Underlayer Stone - Over 4,500 Tons	450	φ31.30 / TN	
3101	i uiliisii & Flace Uliuellayel Stolle - Ovel 4,300 TUIS			\$14,175.00 \$14,175.00
CLIN 0004	Scour Stone:	0	\$0.00 / NA	\$14,175.00 <b>\$0.00</b>
OLIN 0004	GCOUI GCOIIG.	U	φυ.υυ / NA	φ0.00





# **Current Activity Summary**

Project Name: Repair of North & South Piers, Baloney Harbor, MI Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0004	Scour Stone: (Continued)	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0004AA	First 3,500 tons	3,500	\$27.50 / TN	\$96,250.00
4001	Furnish & Place Scour Stone - 1st 3,500 Tons			\$96,250.00
				\$96,250.00
CLIN 0004AB	Over 3,500 tons	600	\$27.50 / TN	\$16,500.00
4101	Furnish & Place Scour Stone - Over 3,500 Tons			\$16,500.00
				\$16,500.00
CLIN 0005	Bedding Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0005AA	First 3,000 tons	3,000	\$28.00 / TN	\$84,000.00
5001	Furnish & Place Bedding Stone - 1st 3,000 Tons			\$84,000.00
				\$84,000.00
CLIN 0005AB	Over 3,000 tons	600	\$28.00 / TN	\$16,800.00
5101	Furnish & Place Bedding Stone - Over 3,000 Tons			\$16,800.00
				\$16,800.00
CLIN 0006	Armor Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0006AA	First 6,000 tons	6,000	\$34.00 / TN	\$204,000.00
6001	Furnish & Place Armor Stone - 1st 6,000 Tons			\$204,000.00
				\$204,000.00
CLIN 0006AB	Over 6,000 tons	825	\$34.00 / TN	\$28,050.00
6101	Furnish & Place Armor Stone - Over 6,000 Tons			\$28,050.00
				\$28,050.00

Sum of CLINs \$4,489,312.18 **Sum of Activities** \$4,489,312.18 \$0.00 Difference

#### North & South Pier Repair, Baloney Harbor, MI DACW35-02-C #### Grand Haven Area Office

#### INITIAL INSPECTION WORKSHEET

#### DEFINABLE FEATURE OF WORK: Site Cast Concrete

#### A. ACTIVITIES INCLUDED UNDER Site Cast Concrete -

ABC Company, Inc

 1008A
 Furnish Rebar
 \$135,000.00

 1008B
 Place Concrete (2000 CY @ \$250.00/CY)
 \$500,000.00

\$635,000.00

#### **B. QUALITY CONTROL REQUIREMENTS -**

SUBMITTALS REQUIRED -	
00700 1	

DIVITI TALS K	こべいはこり	' <del>-</del>		
00700	1	SF 1413 for Subcontracts		Not submitted
03250	1	Expansion Joint Materials	_ <sub>A</sub>	Approved
03307	1	Batching and Mixing Equipment	F	Receipt
03307	2	Conveying and Placement Equipment	F	Receipt
03307	3	Reinforcing Steel (Mat Steel, Bar Steel	Α	Approved
03307	4	Concrete Mixture Proportions;	Α	Approved
03307	5	Cementitious Material	Α	Approved
03307	6	Aggregates	Α	Approved
03307	7	Manufacturer's Literature	Α	Approved
03307	8	Batching & Mixing Equipment - Redi-Mix	F	Receipt
03307	9	Conveying & Placing Equipment - Redi-Mix	F	Receipt
03307	10	Concrete Mix Proportions - Redi-Mix	Α	Approved
03307	11	Cementitious Material - Redi-Mix	Α	Approved
03307	12	Aggregates - Redi Mix	Α	Approved
03307	13	Manufacturer's Data; AEA - Redi-Mix	Α	Approved
03307	14	Manufacturer's Data; WRA - Redi-Mix	Α	Approved
05500	2	Welders	F	Receipt
05552	4	Mill Certs - Ladder Grab Rails	Α	Approved

#### QC TESTS -

CT # 00001 Obtain 1 Cylinder for strength testing at 7 days and 2 Cylinders for 28 days. Minimum of Not Performed one set per day or 1 set per every 150 CY placed. (ASTM C-94)
Required strength at 7 Days = 2,800 p.s.i.; 28 Days = 4,000 p.s.i.

CT # 00002 Check Batch slips for water/cement ratio not to execeed 0.40 by weight Not Performed

CT # 00003 Check Slump at both mixer and discharge ends:

Not Performed

Pumped = 3" - 7" at discharge

Maximum of 5" at Mixer if no admixture used Maximum of 7" at mixer if admixture is used

2 checks per shift is minimum required

CT # 00004 2 Air Content tests required per shift. Check approved mix design for maximum and Not Performed

minimum values acceptable.

#### C. QA/QC PUNCH LIST ITEMS -

#### North & South Pier Repair, Baloney Harbor, MI DACW35-02-C -### Grand Haven Area Office

# **INITIAL INSPECTION WORKSHEET**

	DEFINABLE F	EATURE OF	WORK : Site Cast	Concrete		
c. c	A/QC PUNCH LIST ITEMS - Cont. INCLUDE ADDITIONAL COMMENTS ON D.					
D. L	ABOR RATES -	BASIC	FRINGE	PLUS	TOTAL	
- - -	CLASSIFICATIONS	RATE	BENEFITS	% ————————————————————————————————————	WAGE/HF	₹
- E. II	NSPECTION CHECKS -					N COMPLIANCE
	Check rebar for proper bar sizes, per approvement of the control o	des and top s e Governmen degree of bro during placem	urface. t Representative. I oming. ent and finishing o	f the concrete	. <u> </u>	Yes/ No/ NA
9. 10 <u>.</u>						
	OB SITE SAFETY -	od to wear we	orlanasta (DEDa)		ı	N COMPLIANCE Yes/ No/ NA
7	All employees working over water are require All employees are to wear hard hats.  Concrete Pump must be shut down prior to Review Activity Hazard Analysis for Concrete	cleaning. e Work prior t	o performing this v			
8 G. C	A Evaluation Notes -					DISCUSSED
۷.						Yes/ No/ NA  

# North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-####

Grand Haven Area Office

# PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

A. ACTIVITIES INCLUDED UNDER Site Cast Concrete -								
ABC Company, Inc		Cast Con	crete -					
1008A 1008B	Furnish Rebar Place Concrete (2000)  NTROL REQUIREMENT		0.00/CY)		\$135,000.00 \$500,000.00 \$635,000.00			
SUBMITTALS REQUIRED  00700 1  03250 1  03307 1  03307 2  03307 3  03307 4  03307 5  03307 6  03307 7  03307 8  03307 9  03307 10  03307 11  03307 12  03307 12  03307 13  03307 14  05500 2  05552 4  C. QA/QC PUNCE	SF 1413 for Subcontracts Expansion Joint Materials Batching and Mixing Equipme Conveying and Placement Ec Reinforcing Steel (Mat Steel, Concrete Mixture Proportions Cementitious Material Aggregates Manufacturer's Literature Batching & Mixing Equipmen Conveying & Placing Equipmen Concrete Mix Proportions - R Cementitious Material - Redi- Aggregates - Redi Mix Manufacturer's Data; AEA - I Manufacturer's Data; WRA - I Welders Mill Certs - Ladder Grab Rails	ent quipment Bar Steel s; t - Redi-Mix ent - Redi-M edi-Mix Mix Redi-Mix Redi-Mix		_ A F F A A A A A A F A	Receipt Receipt Approved Approved Approved Approved Approved Approved Receipt Receipt Approved Receipt			
LABOR RATE  CLASSIFIC	OR	BASIC RATE	FRINGE BENEFITS	PLUS % 	TOTAL WAGE/HR			

12 Jul 2002

#### North & South Pier Repair, Baloney Harbor, MI DACW35-02-C -#### Grand Haven Area Office

# PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

SPECIFICATIONS -	
COMMENTS / CONFLICTS	
	DISCUSSED Yes/ No/ NA
ON PREVIOUS PROJECTS -	DISCUSSED
	Yes/ No/ NA
	IN COMPLIANCE
	Yes/ No/ NA
	IN COMPLIANCE
	IN COMPLIANCE Yes/ No/ NA
NOTES -	DISCUSSED
	Yes/ No/ NA

#### REPORT NUMBER CONTRACTORS QUALITY CONTROL REPORT (QCR) 92 Page 1 of 2 DAILY LOG OF CONSTRUCTION - CIVIL DATE 22 Jun 2001 - Friday **PROJECT** CONTRACT NUMBER North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### NA CONTRACTOR WEATHER Weather Caused No Delay ABC Company, Inc. 555 Imagination Road, Fantasy, MI 49494 Temperature Min 80 °F, Max 63 °F; 0.01 IN Precipitation; 10 MPH Wind **QC NARRATIVES Activities in Progress:** Set and drove 24 sheets of SSP Installing Miscellaneous Steel Waler sections c/s 4+00W to 4+50W 123 Tons of Fill stone placed between existing structure and req'd SSP wall from c/s 6+25 W to 6+75W. Safety Inspection / Safety Meetings: Weekly Safety Meeting held today - Use of PPE - Hrad hats & Work Vests PREP/INITIAL DATES (Preparatory and initial dates held and advance notice) A preparatory inspection was held today for the following feature: Miscellaneous Steel & Handrail An initial inspection was held today for the following feature: Miscellaneous Steel & Handrail **ACTIVITY START/FINISH** The following activity was started today: Activity No Description Furnish & Place Fill Stone - 1st 18.000 Tons 2001 No activities were finished today **QC REQUIREMENTS** The following 4 QC requirements were completed today: Requirement No Type Description Results CT-00001 QC Testina Check Plumbness of piles during driving Completed CT-00002 QC Testina Check horizontal placement of piling (Check for Pile-Walk) Completed CT-00003 QC Testing Check vibratory hammer driving rate for SSP - 12"/minute is the minimum rate. If Completed exceeded, switch to Impact hammer. CT-00004 QC Testing Video Tape Interlocks of piling after driving SSP Completed **QA/QC PUNCH LIST** (Describe QC Punch List items issued, Report QC and QA Punch List items corrected) The following QC Punch List item was issued today: Item No Location QC-00001 4+25W Cut-off sheets to finish grade from 4+00W to 4+50W No Punch List items were corrected today CONTRACTORS ON SITE (Report first and/or last day contractors were on site) No contractors had their first or last day on site today **LABOR HOURS** The following labor hours were Reported today: Number of Hours Labor Classification Employees Worked **IRONWORKER** 3.0 10.0 PILE DRIVING SETTER 10.0

2.0

CONTRACTORS	QUALITY CONTRO	L REPORT (QCR)	REPOR 92	RT NUMBER	Page 2 of 2			
	OF CONSTRUCTION		DATE					
			22 J	un 2001 - Friday	/			
PROJECT North & South Pier R	r Repair, Baloney Harbor, MI			CONTRACT NUMBER DACW35-02-C-####				
ABC Company, Inc.	PILE DRIVER OPERATOR	3	Total	1.0	10.0			
Total hours worked to date:	30.0		Total	6.0	30.0			
EQUIPMENT HOURS								
The following equipment he	ours were Reported to	day:		Standby	Operating			
Equipment ID	Description			Hours	Hours			
00000002	Vibratory Hammer			0.0	10.0			
0000003	Arc Welder			0.0	8.0			
0000004	Crane - 100' Boom		Total	0.0	<u>10.0</u> 28.0			
Total operating hours to date	28.0		TOLAI	0.0	26.0			
ACCIDENT REPORTING (Desc	ribe accidents)							
No accidents reported toda	v							
ma	aterial used and work	or, I certify that this Reperformed during this l	Reporting period a	re in complian				
m	aterial used and work	performed during this l	Reporting period a	re in complian noted above.				

MANUFACTURER'S CERTIFICATES OF COMPLIANCE (Read instructions on the reverse side prior to initiating this form)   06/06/2002   02486-37.2	TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR				DATE			TRANSMITTAL NO.		
Titled					06/06/2002			02486-37.2		
TOC   Grand Haven Area Office   97 ON   A DEC Company, Inc   555 Imagination Park Road   DACW35-02-C### NA   HISIS A NEW TRANSWITTAL OF TRA	(Read instructions on the reverse side prior to initiating this form)									
307 South Harbor Street P. O. Box 629 Grand Haven, MI 49147  SPECIFICATION SEC, NO. (Coper only one section with each transminate) Figure 1.		SECTION I - REQUEST F	OR APPROVAL	OF THE FOLLOWING ITEMS	(This se	ction will be in	nitiated by the o	contractor)		
Po   80x 629   Family   Fam			ADCC	C Company, Inc		T NO.			IEVA TO A NOA	AITT A I
Production   Test Results   Production   P				· ·	DACW35-02-C-#### NA					
SPECIFICATION SEC. NO. (Cover only one section with each 10/2488   PROJECT TITLE AND LOCATION   PROPRESSION OF TITLE STRANSMITTAL ISTRANSMITTAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRANSMITAL ISTRA	_		Fantasy	, MI 49494						
TITEM DESCRIPTION OF TEMS SUBMITTED (Type size, model number/etc.)  NO. (Type size, model number/etc.)  A Production Test Results  DATA  D	SPECIFIC	ATION SEC. NO. (Cover only one section with each	PROJECT TITLE A	ND LOCATION	· II					
No.   (Type size, model numberietc.)   CAT, CURVE BRAWNO RESOURCE NO.   ROWNED RESOURCE NO.   ROWNED BRAWNO RESOURCE NO.   ROWNED RESOURCE NO.   ROW		<u>- 199</u>			1					
No. 6  CODE				CAT., CURVE						
a.         b.         c.         d.         e.         f.         g.         h.         l.           12         Production Test Results         DATA         3         3.2.3.4         a.         a.         p.				BROCHURE NO.	COPIES	SPEC.	DRAWING	USE CODE		CODE
12   Production Test Results	a.	b.		` ,	d.			g.	h.	i.
in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.  NAME AND SIGNATURE OF CONTRACTOR  SECTION II - APPROVAL ACTION	12	Production Test Results		DATA	3	3.2.3.4				F
in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.  NAME AND SIGNATURE OF CONTRACTOR  SECTION II - APPROVAL ACTION										
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in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.  NAME AND SIGNATURE OF CONTRACTOR  SECTION II - APPROVAL ACTION	REMARKS					I certify that	the above subm	itted items have I	peen reviewe	<u> </u>
SECTION II - APPROVAL ACTION	112111111111					in detail and	are correct and	in the strict con	formance wit	
SECTION II - APPROVAL ACTION							fications except a	cations except as otherwise		
SECTION II - APPROVAL ACTION										
SECTION II - APPROVAL ACTION										
SECTION II - APPROVAL ACTION				NAME AND			CIONATURE OF CONTRACTOR			
<u> </u>			SEC	TION II - APPROVAL ACTION		1	HANNE AND SIG	MATURE OF CON	INACION	
TWILL, ITTEL VIII OF AUTHORITION	ENCLOSU	RES RETURNED (List by item No.)	010		PROVING AI	ITHORITY		DATE		
				The state of the s				J, L		

**ENG FORM 4025-R, MAR 95** (*ER 415-1-10*) EDITION OF SEP 93 IS OBSOLETE. SHEET 1 OF 1 (Proponent CEMP-CE)

		ANUFACTURER'S CER	UIPMENT DATA, MATER TIFICATES OF COMPLIA rse side prior to initiating this form	NCE	S, OR	DATE			TRANSMITTAL	NO.	
			EST FOR APPROVAL OF T		NG ITEMS (This	section will	he initiated by	the contracto	r)		
TO:		FRO				CONTRA			CHECK ONE:		_
SPECIFIC transmittal)		er only one section with each	PROJECT TITLE	AND LOCATIO	ON						
ITEM NO.		DISCRIPTION OF ITE (Type size, model :			MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8)	NO. OF COPIES		REFERENCE UMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (see Instruction No. 6)	FOR CE USE CODE
a.		b.			c.	d.	e.	f.	g.	h.	i.
REMARK	S				1		in det	ail and are correct	submitted items have et and in strict conform specifications except a	nance with the as otherwise stated.	
			SECTION	N II – APPROV	ΔΙ ΔΟΤΙΟΝ						
ENCLOSUI	RES RETURNED (List by	Item No.)	SECTION		LE, AND SIGNATUR	E OF APPI	ROVING AUT	ΓHORITY	]	DATE	
ENG FOR	M 4025, MAY 91	(ER 415-1-10)	EDITION OF AUG 89 IS	OBSOLETE.		SHEET	OF	_	(Propon	ent: CEMP-CE)	

#### INSTRUCTIONS

- 1. Section I will be initiated by the Contractor in the required number of copies.
- 2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
- 3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288 for each entry on this form.
- 4. Submittals requiring expeditious handling will be submitted on a separate form.
- 5. Separate transmittal form will be used for submittals under separate sections of the specifications.
- 6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specification -- also, a written statement to that effect shall be included in the space provided for "Remarks".
- 7. Form is self-transmittal, letter of transmittal is not required.
- 8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
- 9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

### THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted. E -- Disapproved (see attached)

B -- Approved, except as noted on drawings. F -- Receipt acknowledged

C -- Approved, except as noted on drawings FX -- Receipt acknowledged, does not comply Refer to attached sheet resubmission required.

D -- Will be returned by separate correspondence. G -- Other (Specify)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

\* U.S. Government Printing Office: 1991

TITLE AND LOCATION

CONTRACTOR

CONTRACT NO.

FY04	04 Maintenance Dredging St. Clair River, Michigan					CONTINUE											
					G	C SCI	ONTRACTO	R: (ES		TRACTOR ACTION		APF	PROVING AU	THOR	ITY		
ACT-V-TY ZO	TRANSM-TTAL NO	ЯРЕС ЯЕСТ	DESCRIPTION ITEM SUBMITTED	P A R A G R A P H	OVT OR A/E REVWR	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	∢C⊢−OZ CODШ	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	∢C⊢−OZ COD⊞	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(I)	(m)	(n)	(0)	(p)	(p)	(r)
		01100	SD-01 Preconstruction Submittals														
			Accident Prevention Plan														
			GA,AOF														
			Payrolls and Basic Records														
			SD-07 Certificates														
			Progress Chart														
			GA,AOF														
			Additional Real Estate Rights	1.1.3													
			GA,RED														
		01130	SD-01 Preconstruction Submittals														
			Environmental Protection Plan	1.5													
			GA,AOF														
		01451	SD-01 Preconstruction Submittals														
			Quality Control Plan	3.2													
			GA-AOF														
			SD-08 Manufacturer's Instructions														
			CQC System Manager	3.4.1													
$\sqcup$			GA-AOF														
			SD-09 Manufacturer's Field														
$\sqcup$			Reports														
$\sqcup$				3.6.1													
			FIO														
			Initial Inspection Checklist	3.6.2													
$\sqcup$			Daily Inspection Report	3.7													
		02482	SD-01 Preconstruction Submittals														

TITLE AND LOCATION

CONTRACTOR

CONTRACT NO.

FY0	/04 Maintenance Dredging St. Clair River, Michigan																
					G		ONTRACTO		CON	ITRACTOR ACTION		APF	PROVING AU	THOR	RITY		
A C T I V I T Y NO	TRANSMITTAL NO	орес оест	DESCRIPTION ITEM SUBMITTED	P A R A G R A P H	OVT OR A/E REVWR	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACH-OZ CODE		DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACT-ON CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(I)	(m)	(n)	(o)	(p)	(p)	(r)
		02482	Sounding Equipment Description														
			and Calibration Data														
			GA-AOF														
			Dredging, Conveyance and														
			Disposal Plan														
			Notice of Start of Dredging FIO														
			Instantaneous Load Data														
			SD-09 Manufacturer's Field														
			Reports														
			Daily Report of Dredging														
			Operations														
			FIO														
			Sounding Records														
			FIO														
														_			
						I											

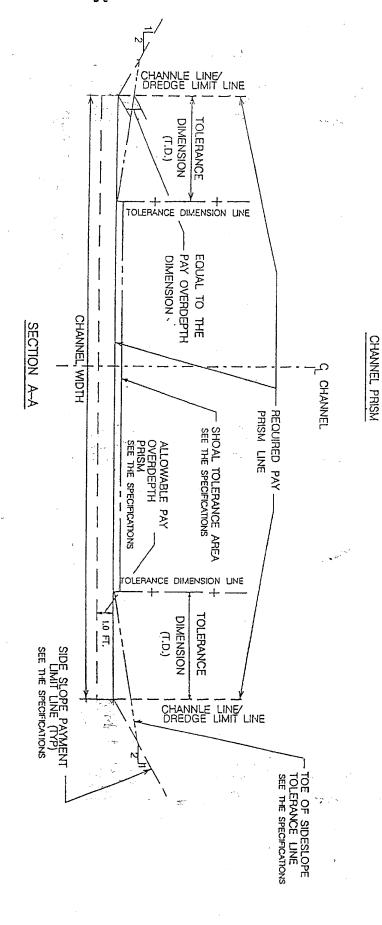
t	AILY REPORT	OF OPE	RATI	ONS-HOP	PER DREDGES  REPORTS CONTROL ENG-CWO						L			
DISTRICT						DREDGE							<del></del>	
EXACT LOCATION	OF WORK						DATE							
						MA	INTENAN	CE						
						☐ NE	W WORK		NUMBER OF PERSONS IN CREW					
AV. LENGTH OF C	UT	FT.	-	CHAR	ACTER OF MATERIAL				HOPPER CAPACITY				CU.	. YDS.
AV. WIDTH OF CU	T	FT. D	ENSITY	OF MAT, IN PL	ACE		GMS/LITE	R AV.	VOL. C	F BIN WATER	-	······································	CU.	YDS.
AV. DIST. TO DUM	P	MILES D	ENSITY	OF WATER	GM:	LITER AT	•	F AV.	UNFILL	ED CAPACITY			CU.	. YDS.
NAVIGATION AND	OTHER DREDGING ALL	D\$ (Describ	be and in	nclude statement	on adequac	and recommen	dations)			•				
· · · · · · · · · · · · · · · · · · ·	W	ORK PER	FORME	D			DRAFT F	OR LOAD	NO.			(	for one load	l only)
	DREDGING AND	HAULING	<del></del>		^	GITATING				LIGHT			LOADED	
NO. OF LOADS	TOT. CU. YDS.		DISPOS	SAL AREA	10	T. CU. YDS.	FORWA	RD						
							AFT		<u> </u>					
							DRAG D	EPTH		M	AX.			MIN.
							INDICAT	ORS LAS	T CHEC	KED ON				
							<u> </u>	ECTORS U	ISED			% 0	F PUMPING	TIME
				DISTRIBU	TION OF	TIME AND	MILES 1		•		Τ			
EFFECTIVE WOR	KING TIME				,	AGITATING (Minutes)		DREDGII	NG AN (Minu	ID HAULING tes)			S RUN Miles)	
PUMPING														
TURNING										··· -				
TO DUMP														
DUMPING														
TO CUT											<u> </u>			
TOTALS														
NON-EFFECTIVE	WORKING TIME													
	UEL AND SUPPLIES													
	WHARF OR ANCHORA	NGE								,	-			
	NATURAL ELEMENTS				-					····				
· · · · · · · · · · · · · · · · · · ·	TRAFFIC AND BRIDGES							<u></u>						
	TING REPAIRS  G BETWEEN WORKS													<u> </u>
LAY TIME	G BETWEEN WORKS			<del>,</del>	-									
FIRE AND BOA	T DRILLS													•••••
MISCELLANEO	····	•						····						20000000
TOTALS											<del> </del>			
LOST TIME			-											
	S AND ALTERATIONS							***************************************	*******					
CESSATION				<del></del>										
COLLISIONS				· · · · · · · · · · · · · · · · · · ·										
TOTAL LOST TO	ME													
TOTAL TIME IN	PERIOD													
	AVERAGE SPE	ED OF D	REDGE			MINUTES RAD	DAR IN US	E						
LOADING				FEET/MINUTE		TIDE DATA W	'AS OBTAI	NED BY M	MEANS	OF				
AGITATING				·····		WEATHER								
GALS. OF FUEL OF	L CONSUMED						NUMBE	R OF INS	PECTIC	NS BY SUPERVIS	ORY I	PERSONNEL		
GALS. OF WATER	CONSUMED					FIELD				OFFICE				
REMARKS														
SUBMITTED BY		<del></del>												
<b>-</b> .					-									
					(SEE RE	VERSE SIDE)								

ENG FORM 27A REPLACES COST FORM 27A, 1 SEP 63, WHICH MAY BE USED.

	BREAKDOWN OF LOADS DREDGED AND HAULED												DATE					
		TIME	PUMP			MIN	UTES				(In	CUBIC Y	ARDS RETA	INED naterial)		MID-I	DEPTH NPLES	
LOAD NO.	UNWATERED	STARTED	STOPPED	PUMPING	TURNING	TO DUMP	DUMPING	TO CUT	TOTAL	SETTLED SOLIDS	SUSPENDED SOLIDS	BIN WATER SOLIDS	TOTAL* •	PER PUMPING MINUTE	PER ELAPSED MINUTE	DENSITY GMS./LITER	% SOLIDS (in place)	MATE AND DRAGTENDERS
					ļ		_					ļ						
_	AVERAGE								ECONON	IC LOAD	DATA	L	<u> 1 ·</u>	<u>[</u>	1	<u> </u>	<u> </u>	
PUMPING TIME (Minutes) ECONOMIC LOAD (Cu Yds.)											DAD NO			DATE OF	rest			
	NOTE. WHEN LOAD IS DEFOCED WITH HOPPERS LINWATERED INDICATE BY LETTER "U"																	
NO	NOTE: * WHEN LOAD IS DREDGED WITH HOPPERS UNWATERED, INDICATE BY LETTER "U"  * TOTAL CUBIC YARDS RETAINED = SETTLED SOLIDS + SUSPENDED SOLIDS - BIN WATER SOLIDS OR DETERMINED DIRECTLY BY YARDAGE METER.  * NOT NECESSARY WHEN MEASURING LOAD BY YARDAGE METER.																	

RE	PORT OF OPERA	ATIONS	S - PIPE	LINE,	DIPP	ER C	R BUC	CKET	DR	EDGES	REP	ORTS CONT ENGC	TROL SY W-0-13		
THRU:		7	ГО:					I	FRO	M:	1			PORT NO.	
CHARACTE R	MAINTE-	NEV		DAILY		STATI	JS 🗌	COM	PLE <sup>.</sup>	TION ANN	UAL	DATE OR F	PERIOD		
	NAME AND TYPE	─ wo	KK —				SIZE PIPELINE [					DIPPER OR BUCKET			
		Tr	DREDGE	DLIMD	Is	LICTI	in. dia.  ON PIPE JET CUTTER OR BUCK			lia. disch.	PROPULSIO	ON	cu. yds. c		
DREDGE	HORSEPOWER	OF ►													
	NUMBER OF CREWMEMBEI		DREDGE	SHORI	E O	THER	PLANT	TOTA	AL	WORK SCHEDULE	SHIFT:	SHIFTS PER DAY DAYS PER			
DDO IFOT	NAME			I		DI	AUTH		W	/IDTH	DEPTH		OVERD	EPTH	
PROJECT AND BAR	LOCATION (inclu	de statio	on numbe	ers)		D	IVILIVI	ONS							
	ABSOULTE DENS	`ITV		IN PL	ACE I	DENIC	ITV			VOIDS RAT	10				
CHARACTE R OF	ABSOULTE DENS	OII Y		IIN PL	ACE I	DENS		GMS/L	iter		iO				
MATERIAL	GRAIN SIZE									GEOLOGICA	L CLAS	SIFICATION	J		
CONTRACT OR	NUMBER							ONTR	AC-	TO   HIRED	LABOR	TOTAL NO. OF DAYS IN WHIC WORK WAS D	E CH		
CHANNEL	AVERAGE BEFOR	E DRED	GING AF	TER DI	REDG	ING							ONE DGING		
CONDITION	DEPTH		, , ,				SOUNI					2 511			
RIVER STAGE	MINIMUM	TIME		MAXI	MUM		TIME			GAGE LOCA	TION				
WEATHER	(clear, cloudy, rain, sno	ow, and fog	g)	1			\	VISIBII		,	imum v	elocity & dir	rection)		
CONDITION	WORK PE	ERFORM	MED						mil	DISTRIBU	JTION	OF TIME			
	ITEM		UNIT	QU	ANTI	TY		E		CTIVE WORKIN	IG TIME		HOURS	6 MIN.	
AVERAGE WI	DTH OF CUT		FEET				PUMPI	ING O		chargeable to cost of REDGING	work)				
	NCE THIS PERIOD	0 050101	FEET							TIVE RENTAL					
	PREVIOUS TO THIS	S PERIOI	D FEET FEET				BOOS			FFECTIVE WOR	Hrs. <b>KING T</b> I	ME	רון		
FLOATING PIF	PE: SHOR	E PIPE:							(6	chargeable to cost of					
	TH OF DISHARGE	PIPE	FEET							E LINES					
AVERAGE LIF			FEET				HANDLING ANCHOR LINES  CLEARING PUMP AND PIPE LINE								
	ED PER PUMP. HR	GROSS	R.P.M. CU.YDS.				CLEARING CUTTER OR SUCTION HEAD								
SCOWS LOAD			NUMBER				WAITING FOR SCOWS								
AVERAGE LO	AD PER SCOW		CU. YDS.				TO AND FROM WHARF OR ANCHORAGE								
	CUBIC YAR		MOVED							CATION OF PLA					
	EDGED THIS PERIONS (computed amo									OPPOSING NAT		LEMENIS			
	ITED (pay place)	uiii)					-			Passing Vess ND Shore Wol					
	EVIOUSLY REPORT	ED:								BOOSTER					
(1) GROS	SS (computed amo						MINO	R OPE	R. I	REPAIRS (explai	in in ren	narks)			
	ITED (pay place)									ATTENDANT P					
	JNT DREDGED TO									AND MAKING U G PLANT BETW					
	SS (computed amo NTED (pay place)	uiii)					<b>+</b>			SHIFT AND SA					
(_, 0)	ATTENDA	ANT PL	ANT							O HOLIDAYS					
ITEM	NAME	OR NUM	/IBER		HOI	JRS	FIRE I								
										US <i>(explain in r</i> FFECTIVE WOR				1	
										EFFECTIVE WOR					
							тот	AL E		ECTIVE AND IT TIME		FECTIVE			
							(chargeable to cost of work)  PCT. OF TOTAL TIME IN PERIOD								
										LOST TIMI					
										t chargeable to cost					
										RS AND ALTERA	RIONS				
							CESS								
										US (explain in r	emarks	)			
	BY DISTRICT PERSONN	NEL	BY DIV 8	OCE PER	RSONN	EL	TOTA	L LOS	ST T	TIME					
CONTRACT		LOPED WH	IICH MIGHT	LEAD TO	) A		PERCI	ENTA	GE (	OF TOTAL TIME					
USE ONLY	HAS ANYTHING DEVEL CHANGE ORDER OR C (If "YES", explain unde	LAIM? er remarks o	on back)	NO		YES		7	ТОТ	AL TIME IN I	PERIO	)			

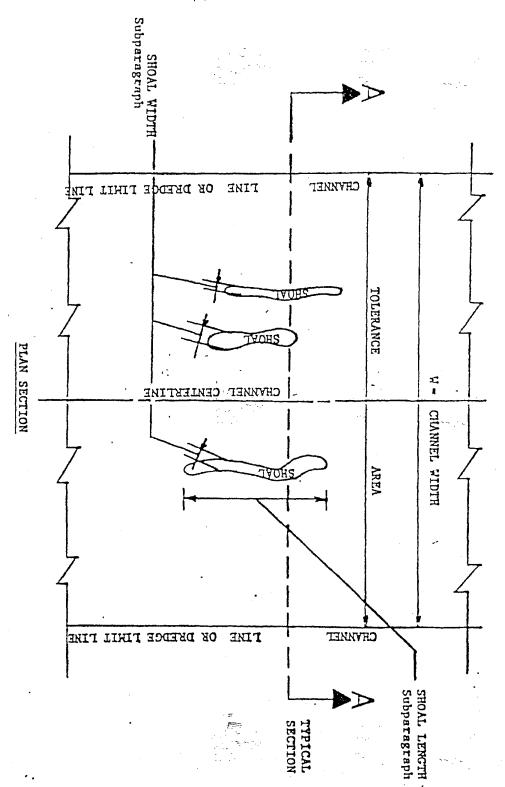
	SUMMARY OF COSTS											
				IT	EMS	COST						
DIRECT PLAN	T OPERA	ATING COS	STS									
UNIFORI	M DAILY	/ RATE BA	SIS (To be	e completed	when submitting Status and Completion reports.)							
СН		to exclud		AT crement cost	( ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '							
PA	<b>YROLLS</b>	(gross)			submiting Annual report.)							
FUE	EL	Е	ARRELS A	T	% MILEAGEPER BARREL							
LUE	BRICAN	ΓS			2(0.1)							
INS	URANC	E		······	elow)							
SUBTOT	AL - UN	IIFORM DA	AILY RATE	OR ACTUAL	L							
SHORE WORK												
		ORE WORK										
OTHER COSTS												
INSPECT	TION AN	D SUPER	/ISION									
-												
SUBTOT												
					PER CUBIC YARD.							
GRAND TOTAL -												
					ANNUAL REPORT DATA							
,		TING SU			(complete when submitting Annual report.							
COMMODITIES	UNIT	QUANTITY	QUANTITY	NTORY VALUE	COST PER RENTAL MINUTE  (Based on total operating cost)	per min.						
FUEL (oil)	BBLS				TOTAL COST OF PLANT  (End of F.Y. reporting period)  BOOK VAULE							
LUBRICANT (oil)	GAL				(End of F.Y. reporting period)  BALANCE IN PLANT ACCOUNT							
LUBRICANT (grease)	LBS				(End of F.Y. reporting period)							
WATER	GAL				PLANT OWNERSHIP COSTS (Actual for F.Y. reporting period):  DEPRECIATION							
					REPAIRS (Adjusted)							
SUBSISTENCE					CESSATION OF WORK							
SUPPLIES					SMALL TOOLS, ETC.							
SUPPLIES					_							
TOTAL			••••		TOTAL							
REMARKS												
SUBMITTED BY	(Name,	title, and	signature)	RECOMMEN ture)	NDED BY (Name, title, and signa- APPROVED BY (Name, tit	le, and signature)						



NOTE: THE EXISTING CHANNEL

BOTTOM IS NOT SHOWN

SEE THE SPECIFICATIONS - SUBPARAGRAPH OVERDEPTH AND TOLERANCES' SECTION 02482 DREDGING



See the Subparagraph "Overdepth and Tolerances" SECTION 02482 "DREDGING"

CHANNEL SHOAL TOLERANCE
Subparagraph

. 4.4

# NINTH DISTRICT LOCAL NOTICE TO MARINERS GENERAL NOTICE ENTRY FORM

1. NAME OF COMPANY:	
2. TYPE OF OPERATION:	
3. LOCATION:	
4. COMMENCE DATE:	COMPLETE DATE:
5. HOURS OF OPERATION:	TO:
6. DAYS OF OPERATION:	TO:
7. NAME OF CONTACT VESSEL:	
8. VHF - FM CHANNELS MONITORED:	
9. SPECIAL REQUIREMENTS/REMARKS:	
11. TELEPHONE #:	
12. SIGNATURE:	DATE:

"NOTE"

TEMPORARY MOORING BUOYS ARE REQUIRED TO BE WHITE WITH A BLUE HORIZONTAL BAND AROUND THE CIRCUMFERENCE OF THE BUOY AND THE WATER LINE. FOR MORE DETAILS CONCERNING REGULATIONS OF MOORING BUOYS REFER TO 33 CODE OF FEDERAL REGULATION PART 66.10-45. A COLOR DEPICTION OF A MOORING BUOY CAN BE FOUND I THE LIGHT LIST VOL. VII GREAT LAKES 1989 (PLATE 4).

# General Decision Number: IL030018 02/27/2004 IL18

Superseded General Decision Number: IL020018

State: Illinois

Construction Types: Heavy (Dredging, and Marine)

Counties: Illinois Statewide.

MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND

MARINE CONSTRUCTION):

ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, NEW YORK, OHIO, PENNSYLVANIA AND WISCONSIN DREDGING AND MARINE CONSTRUCTION Dredging and Marine Construction Projects: floating/land equipment engaged in clamshell, backhoe and dragline dredging, marine construction, bridges, salvage operations and cranes, loaders, dozers, or other equipment used for disposal of dredge spoils or marine construction materials on land at the slip or dock, at the project site, where the above material/spoils is being handled, and all equipment utilized on breakwall/breakwater structures on the Great Lakes, Islands therein, their connecting and tributary waters, including the Illinois Waterway to the Lock at Lockport, Illinois, the New York State Barge Canal System between Tonawanda, New York and Waterford, New York and Oswego, New York, the Duluth-Superior area to the Fond du Lac Bridge Crossing (Minnesota State Highway 23) on the St. Louis River and on the St. Lawrence River eastward to the International Boundary near St. Regis, New York.

 $\begin{array}{ccc} \text{Modification Number} & \text{Publication Date} \\ & 0 & 06/13/2003 \\ & 1 & 02/27/2004 \end{array}$ 

\* SUIL2003-001 01/01/2004

MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND MARINE CONSTRUCTION):

Rates Fringes

# Dredging:

Fireman, Oiler,
Deckhand, & Scowman
(with dipper, hydraulic
or other floating
equipment engaged in
hydraulic and dipper
dredging operations)
Pipeline men (both
afloat & ashore
including loading,
unloading, maintaining,
and handling pipelines
for hydraulic dredges
and sandboats Rangeman,

Hydraulic Dredging LAUNCH OPERATOR - Vessel 800 Horse- Power Or Less	Tankerman, Sweepman and service Truck Driver\$ 22 Lead Deckhand\$ 25		7.61+a+b 7.61+a+b
TUG ENGINEER \$ 26.49 7.61+a+b TUG OPERATOR - Vessel Over 800 Horse-Power \$ 26.49 7.61+a+b TUG WORKERS: Fireman, Lineman, Oiler, Deckhand, Tankerman. Scowman, (on/or with tugboats, launches, or other self-propelled boats) \$ 22.51 7.61+a+b  Mechanic FLOATING EQUIPMENT: Illinois Class I \$ 40.50 12.00+b&c Class III. \$ 34.70 12.00+b&c Class III. \$ 34.70 12.00+b&c Class IV \$ 28.85 12.00+b+c FLOATING EQUIPMENT: Indiana Class I \$ 35.75 11.95+b&c Class III. \$ 34.25 11.95+b&c Class III. \$ 34.25 11.95+b&c Class III. \$ 30.45 11.95+b&c Class III. \$ 30.45 11.95+b&c Class III. \$ 30.45 11.95+b&c Class III. \$ 25.35 11.95+b&c Class III. \$ 25.35 11.95+b&c Class III. \$ 25.35 11.95+b&c Class III. \$ 27.50 15.23+b&c Class III. \$ 23.15 15.23+b&c Class III. \$ 27.65 9.10+b&c Class III. \$ 31.05 9.10+b&c Class III. \$ 27.65 9.10+b&c Class III. \$ 27.65 9.10+b&c Class III. \$ 33.50 15.96+b&c Class III. \$ 33.50 15.96+b&c Class III. \$ 29.80 15.96+b&c Class III. \$ 29.	LAUNCH OPERATOR -		
Over 800 Horse-Power. \$ 26.49 TUG WORKERS: Fireman, Lineman, Oiler, Deckhand, Tankerman. Scowman, (on/or with tugboats, launches, or other self-propelled boats). \$ 22.51  Mechanic FLOATING EQUIPMENT: Illinois Class I. \$ 40.50 Class III. \$ 39.00 Class III. \$ 39.00 Class IV. \$ 28.85 FLOATING EQUIPMENT: Indiana Class I. \$ 35.75 Il.95+b&c Class III. \$ 34.25 Class III. \$ 34.25 Class III. \$ 34.55 Class III. \$ 30.45 Class III. \$ 27.50 Class III. \$ 23.15 Class III. \$ 27.65	TUG ENGINEER\$ 26		
tugboats, launches, or other self-propelled boats) \$ 22.51 7.61+a+b  Mechanic FLOATING EQUIPMENT: Illinois Class II. \$ 40.50 12.00+b&c Class III. \$ 39.00 12.00+b&c Class III. \$ 34.70 12.00+b&c Class IV. \$ 28.85 12.00+b+c FLOATING EQUIPMENT: Indiana Class I. \$ 35.75 11.95+b&c Class III. \$ 34.25 11.95+b&c Class III. \$ 30.45 11.95+b&c Class IV. \$ 25.35 11.95+b&c FLOATING EQUIPMENT: Michigan Class I. \$ 27.50 15.23+b&c Class III. \$ 23.15 15.23+b&c Class III. \$ 23.15 15.23+b&c Class IV. \$ 19.25 15.23+b&c Class IV. \$ 23.15 15.23+b&c Class IV. \$ 35.00 15.96+b&c Class IV. \$ 27.65 9.10+b&c Class IV. \$ 27.65 9.10+b&c Class IV. \$ 23.00 9.10+b&c FLOATING EQUIPMENT: New York: (Caturaugus, Chautauga, Erie and Orleans Counties) Class IV. \$ 29.80 15.96+b&c Class IV. \$ 24.80 15.96+b&c FLOATING EQUIPMENT: New York: (Cayuga, Jefferson, Oswego, and St. Lawrence Counties)	Over 800 Horse-Power\$ 26 TUG WORKERS: Fireman, Lineman, Oiler, Deckhand, Tankerman.	6.49	7.61+a+b
Mechanic  FLOATING EQUIPMENT:  Illinois  Class I.	tugboats, launches, or other self-propelled	2.51	7.61+a+b
FLOATING EQUIPMENT: Illinois   Class I.			7.01.0.2
Class III	FLOATING EQUIPMENT:		
Class IV			
Class IV \$ 28.85			
FLOATING EQUIPMENT: Indiana  Class I			
Indiana Class I		8.85	12.00+b+c
Class III	Indiana		
Class III.	Class I\$ 35	5.75	11.95+b&c
Class III.			
## FLOATING EQUIPMENT:  Michigan  Class I			11.95+b&c
Michigan  Class I	Class IV\$ 25	5.35	11.95+b&c
Class II \$ 27.50	FLOATING EQUIPMENT:		
Class III			
Class IV\$ 23.15	Class I\$ 27	7.50	15.23+b&c
Class IV\$ 19.25 15.23+b&c FLOATING EQUIPMENT: Minnesota Class I\$ 32.55 9.10+b&c Class II\$ 31.05 9.10+b&c Class IV\$ 27.65 9.10+b&c Class IV\$ 23.00 9.10+b&c FLOATING EQUIPMENT: New York: (Cattaraugus, Chautauga, Erie and Orleans Counties) Class I\$ 35.00 15.96+b&c Class II\$ 33.50 15.96+b&c Class II\$ 29.80 15.96+b&c Class IV\$ 29.80 15.96+b&c FLOATING EQUIPMENT: New York: (Cayuga, Jefferson, Oswego, and St. Lawrence Counties)	Class II\$ 26	6.00	15.23+b&c
## FLOATING EQUIPMENT:  Minnesota  Class I	Class III\$ 23	3.15	15.23+b&c
Minnesota Class I	Class IV\$ 19	9.25	15.23+b&c
Class I			
Class II			
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St. Lawrence Counties)			
		9.50	13.10+b&c

Class II\$ 28.00 Class III\$ 24.92 Class IV\$ 20.72 FLOATING EQUIPMENT: New York: (Monroe and	13.10+b&c 13.10+b&c 13.10+b&c
Wayne Counties and the City of Rochester) Class I\$ 27.50 Class II\$ 26.00 Class III\$ 23.15 Class IV\$ 19.25 FLOATING EQUIPMENT:	9.00+b&c 9.00+b&c 9.00+b&c 9.00+b&c
New York: (Niagara)  Class I	14.50+b&c 14.50+b&c 14.50+b&c 14.50+b&c
Cuyahoga, Erie, Lake, and Lorain Counties) Class I\$ 32.99 Class II\$ 31.49 Class III\$ 28.02 Class IV\$ 23.30 FLOATING EQUIPMENT: Ohio: (Lucas, Henry,	7.60+b&c 7.60+b&c 7.60+b&c 7.60+b&c
Ottawa, Wood and Sandusky Counties) Class I\$ 31.27 Class III\$ 29.77 Class IV\$ 26.50 Class IV\$ 22.30 FLOATING EQUIPMENT: Pennsylvania: (Erie	7.60+b&c 7.60+b&c 7.60+b+c 7.60+b&c
County): Class I\$ 24.80 Class II\$ 23.30 Class III\$ 20.74 Class IV\$ 17.24 FLOATING EQUIPMENT: Wisconsin:Includes all marine/floating type	10.23+b&c 10.23+b&c 10.23+b&c 10.23+b&c
work on projects in the Superior/Duluth Harbor, Lake Superior.  Class I\$ 32.00  Class II\$ 30.50  Class IV\$ 27.15	12.90+b&c 12.90+b&c 12.90+b&c 12.90+b&c

# PAID HOLIDAYS (WHERE APPLICABLE):

A- NEW YEAR'S DAY

B- MEMORIAL DAY

C- INDEPENDENCE DAY

D- LABOR DAY

- E- THANKSGIVING DAY
- F- CHRISTMAS DAY
- G- PRESIDENT'S DAY
- H- VETERANS' DAY

#### FOOTNOTES:

- a. \$30.10 per day per employee for medical
- b. Eight paid holidays: A thru H
- c. Hazardous/Toxic Waste Material:
- \*Level A \$2.50 per hour
- \*Level B 2.00 per hour
- \*Level C 1.00 per hour
- \*Level D 0.50 per hour

Such wages shall be above the classifications of work listed under mechanical dredging and Marine construction of this general wage decision. \*Working with Hazardous Waste at this level as defined by the U.S. Environmental Protection Agency.

### CLASSIFICATION DESCRIPTIONS

- Class I Master Mechanic assist and direct
  Class II, Class III, and Class IV, diver/wet tender, engineer
  (hydraulic dredge)
- Class II Crane/Backhoe Operator and Mechanic/Welder, assistant engineer(hydraulic dredge), leverman (hydraulic dredge), diver/tender
- Class III Deck Equipment Operator (Machineryman)
  Maintenance of Crane (over 50 ton capacity) or Backhoe
  (115,000 pounds or more), ug/launch operator, Loader/dozer
  and like equipment on Barge, breakwater wall, slip/dock,
  Scow, Deck Machinery, etc.
- Class IV Deck Equipment Operator (Machineryman/Fireman) (Four equipment units or more) and Crane Maintenance 50 ton capacity and under or Backhoe weighing 115,000 pounds or less, assistant tug operator.

\_\_\_\_\_\_

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material,

- etc.) that the requestor considers relevant to the issue.
- 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

- U.S. Department of Labor
- 200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

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  - 1.1.2.3 Soundings
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### SECTION 02482

#### DREDGING

# PART 1 GENERAL

### 1.1 UNIT PRICES

### 1.1.1 Work Covered by Contract Price

The contract unit price per cubic yard for dredging shall include the cost of removal, conveyance and disposal of all materials as shown on the drawings and as specified herein, except original materials, ledgerock, boulders, cobbles, rock fragments, scrap materials, snags, stumps, piles, debris or other material which cannot be removed or buried below the required depth by the plant specified in the accepted bid, or the equivalent of such plant, without blasting or special apparatus. The unit price shall also include the cost of all work required to be performed for the use of the disposal area. Nothing in this Paragraph shall be construed as prohibiting the removal of excepted material by special means at prices agreed and approved in accordance with applicable provisions of the contract.

# 1.1.2 Measurement and Payment

# 1.1.2.1 Allowable Pay Overdepth and Sideslopes

The total estimated dredging quantity shown on the Bidding Schedule includes the required depth material plus the allowable overdepth material and allowable sideslope material. The allowable pay overdepth quantity listed below is computed for the allowable overdepth prism immediately below the material required to be dredged as shown on the drawings or otherwise specified. The allowable sideslope quantity listed below is computed immediately above the payment limit line for sideslopes as shown and specified.

a. Estimated Allowable Pay Overdepth and Sideslope Quantities in Cubic Yards.

	]	Black Ri	ver	Middle	Ground	Russell	Island
(1)	Overdepth	4,000	C.Y.	1,300	C.Y.	3,500	C.Y.
(2)	Sideslopes	11,500	C.Y.	1,400	C.Y.	0 C.	Υ.

### 1.1.2.2 Shoal Removal

If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel, because of the natural lowering of the side slopes or other natural causes, redredging at the contract unit price, within the limit of available funds, may be performed if agreed upon by both the Contractor and the Contracting Officer.

# 1.1.2.3 Soundings

The drawings (See SECTION 00800 CLAUSE entitled "CONTRACT DRAWINGS, MAPS AND SPECIFICATIONS") represent the conditions existing at the time of survey, but all soundings shown thereon will be verified and corrected by soundings taken before dredging. Determination of quantities removed will be made from after dredging soundings and the calculations made therefrom to determine quantities by in-place measurement. The determination of the quantities to be paid for in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

#### 1.1.3 Volume Calculations

Within the limits of the allowable pay overdepth and side slope payment limit lines described in the Paragraph entitled "DREDGING", the total amount of materials removed and to be paid for under the contract will be measured by the cubic yard in place by computing the volume between the bottom surface shown by new soundings made before dredging and the bottom surface shown by the soundings of a survey made as soon as practicable after the work specified has been completed. Volume computations will be made by the Government by appropriate computer program or by the average end area method, based on cross sections including, but not limited to, cross sections taken at the same locations shown on the contract drawings. The average area of two (2) successive cross sections multiplied by the

The average area of two (2) successive cross sections multiplied by the distance between the cross sections will be accepted as the volume. Any quantities misplaced or not satisfactorily placed in the approved disposal area will be deducted.

# 1.1.3.1 Excessive Dredging

Materials taken from beyond the limits specified in Subparagraphs "Allowable Pay Overdepth" and "Side Slopes", will be excluded from the computed total amount dredged as excessive channel dredging or excessive side slope dredging and for which payment will not be made. The final determination of the amounts of excessive dredging will be based wholly on the surveys made for final examination and acceptance. (See Paragraph entitled "FINAL EXAMINATION AND ACCEPTANCE.")

# 1.1.3.2 Monthly Partial Payments

Monthly partial payments will be based on quantities determined by daily soundings taken by the Contractor or other means acceptable to the Contracting Officer. (See SECTION 00800 CLAUSE entitled, "QUANTITY SURVEYS.") Sounding surveys for partial payment shall be conducted in the same manner specified in the Paragraph entitled, "PRIOR, AFTER AND CHECK SURVEYS," unless otherwise authorized or directed.

# 1.1.3.3 Continuity of Work

Monthly partial payments will be made for work performed prior to final examination and acceptance. However, as final dredging is being performed for final examination and acceptance, no payment will be made for such final dredging work performed in any area until the depth required under the contract is secured in the whole of such area, unless prevented by ledge rock, original material, or other obstructions, which cannot be removed by the plant specified in the accepted bid, or the equivalent of such plant, without blasting or special apparatus. No payment will be made for final excavation in any area not adjacent to and in prolongation of areas where full depth has been secured, except by decision of the Contracting Officer. If a nonadjacent area is excavated to full depth

during the day to day operations carried on under the contract, payment for all work therein may be deferred until the required depth has been secured in the area intervening.

### 1.2 PERFORMANCE REQUIREMENTS

### 1.2.1 Monitoring of Disposal Area

Unless otherwise directed by the Contracting Officer, there shall be no overflow or discharge as a result of operations under this contract. If the Contracting Officer directs the Contractor to release flow from the CDF into the river, the Contractor shall continuously observe the effluent quality of the disposal area discharge weirs during the period of use under this contract and shall report its observations on its daily QC reports. During all disposal operations the Contracting Officer will periodically conduct water quality monitoring of any allowed effluent from the confined disposal facility discharge weirs to verify that the quality of the effluent is within acceptable limits. Water samples will be obtained, stored and analyzed by the Government according to the recommended procedures of the U.S. Environmental Protection Agency Publication "Methods for Chemical Analysis of Water and Wastes," EPA 600 4 79 020. The Contractor shall furnish and install additional weir boards at no additional cost to the Government, to prevent water within the CDF from overtopping the weirs. If additional weir boards cannot be added to increase the holding capacity of the disposal area and/or any allowed discharge does not meet acceptable levels of quality, the Contractor will be directed to alter or discontinue its disposal operations until the threat of overtopping no longer exists or the effluent from the discharge weirs meets the specified acceptable limits of quality, all at no additional cost to the Government. The Contractor shall monitor the elevation of water in the CDF and shall promptly notify the Contracting Officer any time there is imminent risk of overtopping weirs or dikes.

# 1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-01 Data

Sounding Equipment Description and Calibration Data; GA-AOF

Verification that the Contractor's sounding equipment has been calibrated to correspond with the Government's sounding equipment shall be submitted prior to commencing work. Also submit the description of the Contractor's horizontal positioning equipment, sounding equipment and transducer frequency prior to commencing work.

Dredging, Conveyance and Disposal Plan; GA-AOF

Prior to bringing equipment to the project site, submit plans of the proposed dredging, conveyance and disposal operations.

Notice of Start of Dredging; FIO

Provide ten calendar day's advance written notice of the planned start of actual dredging operations to allow the Government to schedule and perform the prior-to-dredging sounding survey work before arrival of the dredging equipment.

Instantaneous Load Data; FIO

Upon request of the Contracting Officer's Representative in the field, the Contractor shall immediately provide a copy of the hauling vessel's load data at the time of such request. Such instantaneous reporting is supplemental to all other required reporting.

SD-09 Reports

Daily Report of Dredging Operations; FIO

Both sides of the report of operations form (ENG FORM 4267 or ENG FORM 27A), as appropriate to the type of work being performed, copies of which are included in SECTION 01999, shall be completed and furnished daily. Each report shall contain a signed certification in the "REMARKS" space attesting that no overflow or discharge occurred from the dredging vessel(s) while in transit from the dredging area to the unloading area. In the event an overflow or discharge occurs while in transit, such certification shall not be made and instead an oral notification and complete written report on the incident shall be made to the Contracting Officer in shortest possible time. When appropriate and approved, quality control compliance inspections may be reported under the "REMARKS" item on the form. The Contractor shall submit an original and two (2) copies per calendar day to the Contracting Officer unless otherwise directed. An adequate supply of the report of dredging operation forms will be provided the Contractor by the Government upon request.

SD-18 Records

Sounding Records; FIO

A copy of the prior and after soundings of the transfer site shall be furnished.

### 1.4 PROJECT/SITE CONDITIONS

# 1.4.1 Character of Materials

The material to be dredged in the vicinity of the Black River confluence (Sta. 1987+00 - 2015+00) consists primarily of shoaled material composed of SAND with small amounts of gravel, cobbles, and silt. The native material may be encountered in the allowable overdepth prism, and consists of hard to soft clay with some sand, gravel, and occasional cobbles and boulders.

The material to be dredged in the vicinity of the St. Clair Middleground (Sta. 1400+00 to 1432+00) consists primarily of shoaled material composed primarily of SAND and SILT with some gravel. The native material may be encountered in the allowable overdepth prism, and consists of Silty sand and Clay with trace amounts of gravel.

The material to be dredged in the vicinity of Russell Island (Sta. 630+00-666+00) consists primarily of SAND and SILT with some gravel. The underlying native material consists of soft to stiff clay with sand and gravel. Original material may be encountered within the allowable

overdepth and side slopes. The records of previous dredging and sampling are available for inspection at the U.S. Army Corps of Engineers, Detroit District, 477 Michigan Avenue, McNamara Building, Detroit, Michigan.

### 1.4.2 Disposal Area Conditions

The existing conditions shown within the Government-furnished disposal area are based upon topographic and sounding surveys performed on the date shown on the drawings. The limits of the disposal area are shown on the contract drawings and no variations beyond these limits are permissible. Dredged materials placed outside of the limits of the disposal area shall be removed at no additional cost to the Government and deposited within the area approved for disposal of dredged materials.

### 1.4.3 Transfer Site

If use of a Government furnished disposal site entails use of a transfer site, the Contractor shall take soundings across the full width and length of the transfer site prior to the start-up of and immediately after the completion of transfer operations under this contract. Soundings shall be taken on lines and at intervals acceptable to the Contracting Officer.

### 1.4.4 Caution

The Contractor is informed that materials previously placed in the CDF are in various stages of drying out and consolidating. Some areas are crusted over but are unstable below the crust. Vegetation may be growing upon the crust. The ability of existing materials in the CDF to support equipment and personnel is unknown. The Contractor shall make its own investigation of conditions as it deems necessary for the selection of equipment to be used at the site and to provide for the safety of the work and the workers.

# 1.5 SEQUENCING AND SCHEDULING

# 1.6 Delivery of Plant and Order of Work

Unless otherwise directed by the Contracting Officer, the Contractor shall accomplish the required work within the time established in SECTION 00800 CLAUSE entitled, "COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK."

### 1.7 Sequence

Dredged material shall not be hauled across segments of the required dredging area which have been examined and found to be acceptable. There is no required sequence of work.

# PART 2 PRODUCTS (NOT APPLICABLE)

### PART 3 EXECUTION

### 3.1 DREDGING

The Contractor shall perform all dredging work to remove material to the required depths within the limits shown on the drawings and as specified. Any materials in the allowable overdepth prism and allowable side slopes are not required to be removed. Dredge materials shall be placed in the Government-furnished CDF by hydraulic means only. Indicated required dredging areas within required downstream and upstream dredging limits will be revised by the Government, after obtaining the before (prior to)

dredging soundings. The Contractor may be required to suspend dredging at any time when for any reason the gauges or ranges cannot be seen or properly followed. During actual dredging operations the Contractor shall avoid creation of excessive turbidity. Other than for hopper overflow while dredging, discharge into the harbor, river or lake from any pipes or pumping apparatus on the Contractor's dredge and floating plant is prohibited at all times. Overflow or discharge into Canadian waters is prohibited.

### 3.1.1 Obstructions

Should original material, ledgerock, boulders, cobbles, rock fragments, scrap materials, snags, stumps, piles, debris or other material be encountered which cannot be removed by the plant specified in the accepted bid, or equivalent plant, without blasting or special apparatus, the Contractor shall remove there from all overlying material within the required dredging prism which in the judgment of the Contracting Officer can be removed by the use of the plant specified in the accepted bid or equivalent plant.

# 3.1.2 Channel Crossing

Any existing channel crossing that is damaged due to the Contractor's operations shall be repaired by the Contractor and at its expense.

# 3.1.3 Overdepth and Tolerances

Two (2) drawings are enclosed in SECTION 01999 to aid in defining the requirements specified hereinafter.

# 3.1.3.1 Allowable Pay Overdepth

To cover inaccuracies of the dredging process, materials actually removed from within the channel lines to a depth of not more than one (1) foot below the required pay prism line will be measured and paid for at the contract price. However, the maximum quantity of overdepth materials to be paid for will be equivalent to that quantity present within the one (1) foot overdepth prism immediately below the materials required to be dredged as determined from the prior to dredging soundings. Any dredging below the allowed one (1) foot will be considered as excessive dredging and for which payment will not be made.

# 3.1.3.2 Side Slopes

Materials actually removed, within limits shown on the drawings, to provide for final side slopes not flatter than one vertical (1V) on two horizontal (2H), perpendicular to the channel line or dredge limit line, whichever is applicable, but not in excess of the amount originally lying above the side slope payment limit line will be calculated and paid for. The provisions of this Subparagraph also apply to end slopes at the upstream and downstream dredging limits of the channel. However, if the Contractor elects to use the box cut method on the side slope this material will be paid for whether dredged in their original location or removed by dredging a space at the bottom of the slope to accommodate the side slope materials falling into the box cut.

### a. Restriction

At the International Boundary only, the Contractor is prohibited

from dredging side slopes and end slopes, and shall not reach across the boundary into Canada with its equipment to remove any materials for any reason.

### 3.1.3.3 Toe of Side Slopes

Any materials remaining above the required pay prism line will be allowed to remain in place, but will not be paid for, provided these materials lie below the tolerance line specified hereinafter. The toe of side slope tolerance line, as shown on the cross-section drawings, is defined as a straight line through the following two (2) points and extended to the side slope line:

- a. A point on the required pay prism line located a distance from the channel line or dredge limit line, as shown on the contract drawings (shown on the enclosed drawings and contract drawings as tolerance dimension "T.D.") and;
- b. A point located at the channel line or dredge limit line, whichever is applicable, and above the required pay prism line a distance equal to the specified channel allowable pay overdepth.

### 3.1.3.4 Shoals

A tolerance of 0.5 feet above the required pay prism line, in the remaining channel area, will be allowed for acceptance of remaining shoal materials. The allowed shoal materials may be left in place but shall be of such nature that they will not affect navigation, and will not be paid for unless they are removed. The remaining channel area is defined as that portion of the channel which lies between the two (2) points located on the required pay prism line for determining tow of side slope tolerance line and is shown on the enclosed drawing titled "CHANNEL SHOAL TOLERANCE" as Tolerance Area. The allowed shoaling shall not be continuous throughout the required dredging area. The limitations for individual shoals are as follows:

# a. Maximum width:

Maximum width of each remaining shoal area not required to be removed shall be not more than five percent (5%) of the full project channel width or ten (10) feet, whichever is greater.

### b. Longitudinal length:

Longitudinal length of each remaining shoal area not required to be removed shall be not more than twenty-five percent (25%) of the full project channel width or fifty (50) feet, whichever is greater.

### c. Cumulative width:

Cumulative width of remaining individual shoals not required to be removed within the shoal area, at any channel cross section, shall be not more than twenty-five percent (25%) of the full project channel width or ten (10) feet, whichever is greater.

# 3.2 CONVEYANCE AND TRANSFER OF DREDGED MATERIALS

# 3.2.1 General

All nautical vessels, pipelines and land based transport and conveyance systems shall be operated, loaded and unloaded in such manner as to prevent overflow, spills, leaks, waste, or other loss of dredged materials between point of pick-up and point of deposition within the disposal area. Hauling vessels shall have sufficient sidewall height and integrity to prevent drainage over or through the sides and bottom during hauling. The Contractor may base its bid on its own transfer facilities rather than the pipeline and connection point furnished by the Government.

# 3.2.2 Restriction

The method employed by the Contractor in conveying dredged materials to the disposal area shall be as approved by the Contracting Officer at all times. Temporary dumping or placement of materials outside of the disposal area for subsequent rehandling into the disposal area is prohibited unless otherwise approved by the Contracting Officer. Placement of dredged materials into the Government-furnished CDF is restricted to hydraulic methods only.

# 3.2.3 Vehicular Conveyance

Vehicular conveyance of dredged materials into the Government-furnished disposal site is not feasible. Dredged materials that are conveyed into a Contractor-furnished disposal area via vehicle shall have leak tight cargo bodies or compartments with spill and splash preventing devices as well as necessary sidewall height. Vehicles shall not be loaded over their capacity, nor shall any loads exceed the limits of the thoroughfare over which the vehicles are operated. If the dredged materials are transferred from vessels to vehicles by bucket type equipment or any device which may leak or spill, provisions shall be made to prevent water and materials from escaping into the waterways. In addition, the Contractor shall insure that materials that are splashed around vehicles during loading or unloading operations are cleaned up prior to the vehicle leaving the site so as to prevent materials from being tracked on to public thoroughfares or escaping into the waterways. The Contractor shall immediately clean up any materials spilled on the public thoroughfares. In addition, the Contractor shall maintain the transfer site in a neat and orderly condition.

# 3.2.4 Pipeline Conveyance

Dredged materials that are conveyed into the Government or Contractor-furnished disposal area via hydraulic-pipeline are subject to the conditions specified herein. At the Government-furnished CDF, the hydraulic discharge line from the dredge is only allowed to be placed within the pipeline access easements shown on the drawings. The Contractor shall provide its own mooring facilities if required for its operation.

### 3.2.4.1 Provision and Maintenance of Access Route

The Contractor may use the existing access dock and the existing vehicle path into Government-furnished disposal area as required for its operations and shall maintain them throughout the course of the work. If existing vehicle paths are used, the Contractor shall provide any improvements required to support its vehicle traffic.

# 3.2.4.2 Pipelines

Pipelines shall be of such design and fabrication as to preclude any leaks or breaks.

# 3.2.4.3 Pump Pressure

The Contractor shall closely monitor pressure gages at hydraulic dredges and any pumps. Should a sudden drop in pressure occur indicating a leak or break in a pipeline, the Contractor shall immediately cease pumping operations and promptly correct the leak or break.

# 3.2.4.4 Pipe Cleaning

Prior to disconnecting any pipeline for relocation purposes, the Contractor shall flush the pipeline until clear water is observed at the point of discharge within the CDF.

# 3.2.4.5 Pipeline Blockage

Should any pipeline require disconnection for removal of plug or blockages, materials removed from the pipeline shall be disposed of in the Government or Contractor-furnished disposal area. The Contractor's method for disposal of materials removed from a plugged or blocked pipeline shall be subject to the approval of the Contracting Officer in accordance SECTION 01130, "ENVIRONMENTAL PROTECTION".

### 3.2.4.6 Pumping Operations

The Contracting Officer may require the Contractor to cease pumping operations when actual wave height's at any pipeline are at or exceed four (4) feet or it is evident that rough seas might induce severe stresses on the pipeline.

# 3.2.4.7 Pipeline Inspection

The Contractor shall visually inspect pipeline(s) twice each eight (8) hour working period. If a twenty-four (24) hour work schedule is used, proper lighting shall be provided for inspection.

# 3.2.5 Contractor-Furnished Transfer Site

All operations in connection with the use of a Contractor-furnished transfer site shall be at the Contractor's risk.

# 3.3 DISPOSAL OF DREDGED MATERIALS

# 3.3.1 General

The dredged materials shall be deposited within the Government-furnished disposal area shown on the contract drawings and/or within an authorized Contractor-furnished disposal area. The Government-furnished disposal area has sufficient capacity to contain all materials to be dredged under this contract; however, the Contractor may base its bid on a disposal area other than the one furnished by the Government. Placement of the dredged materials within the disposal area shall be as specified and shown except as otherwise directed by the Contracting Officer. Except as otherwise authorized by the Contracting Officer in writing, no disposal shall be performed unless a representative of the Contractor for Quality Control is present at the time. The method employed by the Contractor in depositing dredged materials in the disposal area shall be as approved by the Contracting Officer at all times.

# 3.3.1.1 Misplaced Material

Any material that is deposited elsewhere than in the places designated in this contract or approved by the Contracting Officer will not be paid for. The Contractor shall be required to remove such misplaced material at its expense and deposit it in the place designated in this contract or approved by the Contracting Officer.

# 3.3.2 Government-Furnished Disposal Area

The Dickenson Island East Confined Disposal Site is as shown on the drawings. The existing access dock and vehicle path to the CDF as shown on the contract drawings are available for the Contractor's use. The Contractor may have to cut down vegetation and small trees growing upon the path in order to travel on the path. The Contractor shall provide its own temporary facilities for mooring and conveyance of dredged materials to the diked disposal area. The Contractor's facilities for disposal operations shall be as approved by the Contracting Officer and shall be removed upon completion of work unless otherwise allowed. The locations in which the Contractor's pipeline facilities may be placed shall be as shown and as approved by the Contracting Officer. The Contractor's operations shall be kept within the access areas shown on the drawings. The Contractor's discharge pipeline shall extend a minimum of 100 feet into the portion of the disposal area identified for use under this contract as shown on the drawings. Discharge into the diked disposal area shall be controlled by the Contractor so as to provide minimum of one (1) foot of freeboard or as required to insure dike integrity. The maximum height of placed material at the completion of the work shall not exceed eight and one-half (8-1/2)feet above Low Water Datum (Elev. 572.2 feet). No material, other than that required or allowed to be dredged under this contract, may be disposed of in the diked disposal area. No disposal of materials shall occur within 100 feet of the weir structure. During all disposal operations, drainage toward the overflow weir shall be maintained at all times. The overflow weir shall be under the control of the Contractor. Weir boards do not exist at the CDF. Replacement boards shall be furnished and installed by the Contractor at no additional cost to the Government. To provide for and maintain a continuous flow of the dredged materials and water in the disposal area, the Contractor shall cut, knock down or remove existing weeds and brush within the disposal area as required for its operations.

# 3.3.2.1 Restrictions

The Contractor may place personnel, equipment and discharge piping on the land only in locations approved by the Contracting Officer. Such locations shall be coordinated and established in the field with the Contracting Officer'a Representative for the purpose of protecting a plant species classified by the Government as threatened. (See SECTION 01130 entitled "ENVIRONMENTAL PROTECTION").

# 3.3.3 Contractor-Furnished Disposal Area

All materials deposited within a Contractor-furnished disposal area and all operations in connection therewith shall be at the Contractor's risk.

# 3.4 CONTRACTOR QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for dredging and disposal operations to assure compliance with the contract requirements and record its inspections of items under this system,

including, but not limited to, the following:

- a. Layout of work, transfer and disposal areas.
- b. Proper dredging depths and disposal heights.
- c. Conveyance and disposal operations.
- d. Prevention of non-conforming discharge to waterway.
- e. Removal of misplaced material.
- f. Observations of CDF effluent quality.
- g. Safety requirements.

#### 3.5 GOVERNMENT INSPECTION

### 3.5.1 Gauge Maintenance

The Contractor shall maintain its gauges, ranges, location marks and limit marks in proper order and position. The presence of a Government inspector shall not relieve the Contractor of its responsibility for the proper execution of the work in accordance with the specifications and drawings.

#### 3.5.2 Facilities

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boat operators, laborers and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the Paragraph "FINAL EXAMINATION AND ACCEPTANCE."

# 3.5.3 Transportation

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, suitable transportation from designated points on shore to and from the various pieces of off-shore plant and off-shore disposal areas.

# 3.5.4 Compliance

Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

### 3.6 PRIOR, AFTER AND CHECK SURVEYS

Prior, after and check surveys will be made by sonic sounding methods. The Contractor's sounding equipment shall be calibrated to correspond with the Government's sounding equipment. The Government will make prior and after surveys and may make check surveys. The Contractor shall make check surveys. Prior soundings will be taken on sounding lines approximately 100 feet apart within the areas required to be dredged or which will be affected by the dredging, unless otherwise determined by the Contracting Officer. The check surveys and after dredging soundings shall be taken as close as practicable on the same lines established and used for the prior to dredging soundings, unless otherwise determined by the Contracting

Officer. The readings along the sounding lines shall be at approximately ten (10) foot intervals, unless otherwise determined by the Contracting Officer. Additional soundings will be taken as the Contracting Officer may deem necessary. Only one (1) prior survey will be made for the project, by the Government. If additional prior surveys are required, due to the Contractor's operations, the cost of such surveys shall be paid by the Contractor. The cost of such surveys shall be the same as specified in the Paragraph entitled, "FINAL EXAMINATION AND ACCEPTANCE."

# 3.7 FINAL EXAMINATION AND ACCEPTANCE

### 3.7.1 Examination

As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Contracting Officer will not be subject to damage by further operations under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps or other lack of contract depth be disclosed by this examination, the Contractor is required to remove same by dragging the bottom or by dredging at the contract rate for dredging, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoals may be waived at the discretion of the Contracting Officer. The Contractor or its authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two (2) sounding or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of \$1,700 per calendar day in which the Government plant is engaged in sounding or sweeping and/or is enroute to or from the site or held at or near the said site for such operations.

# 3.7.2 Acceptance

Final acceptance of the whole or part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

END>